Home Depot Upgrade Information

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# Overview

The Home Depot will be upgrading from 2015.3.3 to 2016.4.2 on 8/15, 8/17 and 8/18.

The expectation has been set that they can call in any time as our support is 24x7.

# Home Depot Upgrade Contacts

Your primary Home Depot contacts during the upgrade with be John Thebault and Patrick Mayes. One additional Home Depot resource (TBD) will be assisting in the upgrade. The core team will consist of three individuals.

| **Contact** | **Email** | **Location** |
| --- | --- | --- |
| John Thebault | John\_Thebault@homedepot.com | Atlanta, GA (EST) |
| Patrick Mayes | patrick\_mayes1@homedepot.com | Atlanta, GA (EST) |

# Environments

All information is as of February 10, 2016. Updated architectural diagrams have been requested; however, no updates have been provided by THD team.

| **Environment** | **PE Version** | **Architectural Diagrams** | **Background Information** |
| --- | --- | --- | --- |
| Dev | 2016.4.2 | None | Split install. Postgres is load balanced |
| QA | 2016.4.2 | None | Split |
| Non Prod | 2015.3.3 | [View](https://confluence.puppetlabs.com/pages/viewpage.action?pageId=55642610&preview=/55642610/59801811/np_datacenters.png) | 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. |
| Production (Stores) | 2015.3.3 | [View](https://confluence.puppetlabs.com/pages/viewpage.action?pageId=55642610&preview=/55642610/59801809/prod_stores.png) | 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. |
| Production (DC) | 2015.3.3 | [View](https://confluence.puppetlabs.com/pages/viewpage.action?pageId=55642610&preview=/55642610/59801810/prod_datacenters.png) | 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. |

Puppet Server Cheat Sheet can be found at:

<https://confluence.puppetlabs.com/pages/viewpage.action?pageId=55642610&preview=/55642610/55642606/PuppetServerCheatSheet%20(2).xlsx>

# Upgrade Timeline

| **Environment** | **Upgrade Dates/Times** | **Primary Support** | **Secondary Support** |
| --- | --- | --- | --- |
| Non Prod | Tuesday, 8/15  5pm - midnight ET | Erik Hansen | Nick Walker |
| Production (DC) | Tuesday, 8/22  9am - 5pm ET | Erik Hansen | Charlie Sharpsteen |
| Production (Stores) | Thursday, 8/24  9am - 5pm ET | Erik Hansen | Charlie Sharpsteen |

# Upgrade History

After upgrade to QA THD did some testing to validate/verify Non-Prod.

They ran into issues with their custom code. No further details were provided as to the nature of these issues.

Continuous development (fast paced) led to a discussion of sanity checking QA for this stuff before moving forward to Non-Prod.

Previous upgrades have been done in-place due to the complexity with firewalls. Concerns around losing logging. Have indicated they can take snapshots.

<https://docs.puppet.com/pe/latest/upgrade_split.html>

# PE Architecture and Use Case

**MCollective**: Deploying modules, control repo.

**Agent Check-in Cadence**: Puppet calls in for a daily noop run. Otherwise, triggered by mcollective.

**Tuning**: 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.

**Integrations**: Jenkins. Non prod has Jenkins.

**Git**: Prod and Non-Prod

**Service Now Integration**: Developed in-house. The Service Now plugin wasn’t adequate, so THD rolled their own. Used Servicenow web API and then their code does whatever it needs to go to Puppet. ~8/9k LOC.

**Server Topology:**

* 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

# Outstanding Upgrade Questions

The following questions have been sent out to THD for further clarification.

1) What are your test criteria or a rollback plan for the upgrade(s)?

2) Can you confirm that these upgrades will be done in-place?

3) Have you already completed a catalog preview/code review/puppet lint/etc in preparation for the upgrade(s)?

4) Can you confirm that you'll be upgrading from 2015.3.3 to 2016.4.2?

5) Do you have a 'run book' that I can share with Support that outlines the steps you'll take in the upgrade?

# Puppet History

## Licenses & Renewals

## PS Engagements

| **PSE** | **Dates** | **Trip Goals / Purpose** |
| --- | --- | --- |
| Jeff McCune (Open Infrastructure Services) | 11/30/2015 - 12/04/2015 | Trip purpose was to:  1) Review their current workflow for changes moving from non-production to production and come up with a prioritized list of recommendations.  2) Provide a second list of items describing how to integrate the recommendations into their workflow.  Delivered a PDF with Workflow Shortcomings and Recommendations. |
|  |  |  |

## Training

| **Course** | **Dates** | **PSE** |
| --- | --- | --- |
| Puppet Practitioner | 01/13/2015 - 01/15/2015 | Troy Klein |
|  |  |  |

## Formal Interactions

| **Trip Purpose** | **PSE** | **Dates** | **Notes** |
| --- | --- | --- | --- |
| [Puppet Enterprise Introduction](https://confluence.puppetlabs.com/display/CL/The+Home+Depot+SE+Trip+Report+2014-03-17) | Reid Vandewiele | 03/17/2014 | PE Proposal for conversion from HP OpsWare to an alternative product.  Proposed solution involved ServiceNow as an ENC, regional Puppet Masters and regional PuppetDB instances, with Splunk as global aggregate reporting.  Discussed THD’s use case - application deployment.  THD communicated that they want to use a tool the way it’s intended to be used. Want Puppet to lead THD in their adoption of Puppet with white papers, documentation and best practices. |
| Upgrade Planning (2015.3.x) | Zack Smith | 01/05/2016 | Zack worked with THD to walk through upgrade approach and planning for 2015.3.x. |