

Puppet: Introduction to another deployment tool



Table of contents

- ☐ **Who am I (to use puppet)?**
- ☐ **What is puppet?**
- ☐ **What do I do with puppet?**
- ☐ **Why to use puppet?**
- ☐ **What are the common architectures for puppet?**
- ☐ **How difficult is it to be able to use puppet?**
- ☐ **Puppet in IBM**
- ☐ **Let's go over some examples – What can be done with puppet?**
- ☐ **Puppet code structure**
- ☐ **Around puppet**

Who am I?

Who am I (to use puppet :))?

- ☐ **UNIX system administrator**
- ☐ **Using puppet for about 10 years for big or small companies**
 - **European Parliament (2000 assets)**
 - **Banking customer in Swiss Romande (300 assets)**

What is puppet?

What is puppet?

- ☐ **YACMT: Yet Another Configuration Management Tool**
 - **Handle all kind of configuration items of an asset**
- ☐ **Standardization tool**
 - **Consistency**
 - **Predictable**
 - **Flexible**
- ☐ **Software ruby (third party) based**
- ☐ **Puppet is a tool to manage:**
 - **UNIX / Windows servers**
 - **Network equipments**
 - **And more and more**

What is puppet?

- ☐ **Reporting capability**
- ☐ **Monitoring capability**
- ☐ **Reduce support / cost**

What do I do with puppet?

What do I do with puppet? (Not exhaustive list)

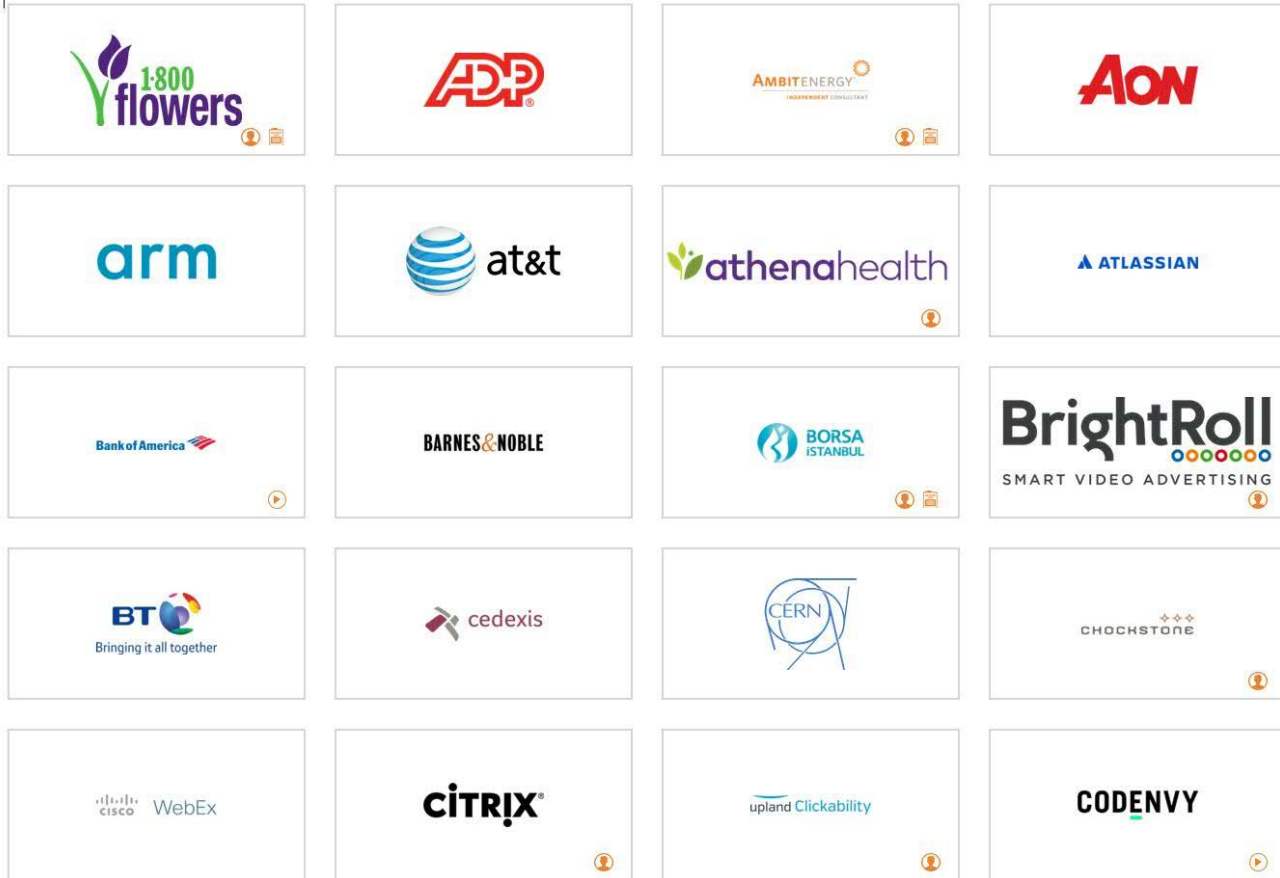
- ☐ **Deployment of all IBM agents tool**
 - TSM
 - BigFix
 - TWS (scheduler)
 - TPC (Storage information collection)
 - ITM
- ☐ **System configuration**
 - Ssh
 - Users
- ☐ **Server security**
 - ITCS104, CIS
 -

What do I do with puppet?

- ☐ **Compliance (Check list activation, ...)**
- ☐ **VG, LV, FS management**
- ☐ **Middleware/DBA layer**
 - **WebSphere**
 - **Oracle**
 - **IHS (IBM HTTP server)**
 - **Tomcat**
 - **MQ Series / MQ FTE**

Why to use puppet?

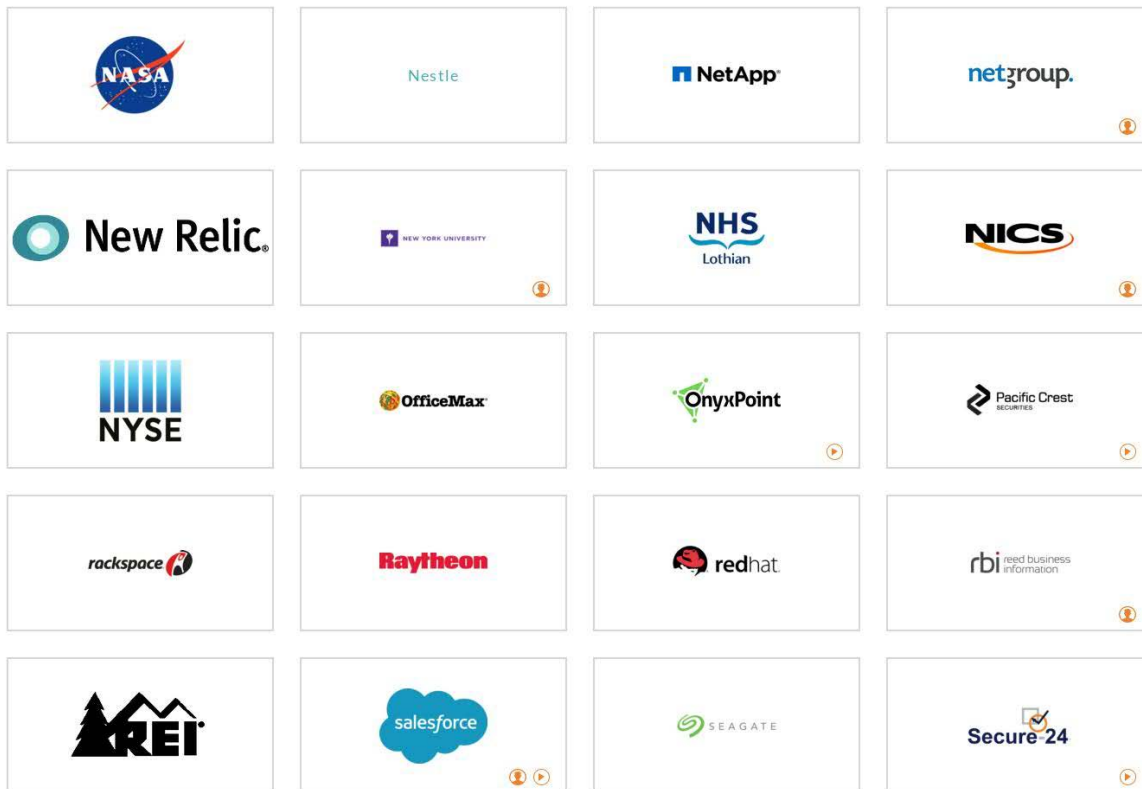
❑ But who is using puppet?



Do I have

Why to use puppet?

❑ But who is using puppet?



Let's p

tes :D

Why to use puppet?

☐ Before using puppet

-
-
-
-
-
-
-
- **Why the hell I have to do this manual**
- **Why the hell my 200 zillions servers**
- **Why and why and why?**
- **Ok, I will connect to all servers to apply the same setting on them?**
Thanks god I am paid for it!



Why to use puppet?

❑ After using puppet

-
-
-
-
-
-
-
- Whooooohooo! Thank
- I added a piece of code to the remaining.
-



Why to use puppet?

- ☐ **Where (asset like) can I use puppet?**
 - **Not free version**
 - https://puppet.com/docs/pe/2017.3/installing/supported_operating_systems.html
 - **Free version:**
 - **Everywhere ruby (version ≥ 1.8) can be installed (It covers all OS version not listed in previous email... Including AIX 5.3 and Solaris 8 :D)**
- ☐ **(FYI) History:**
 - **Designed first for Linux (All kind of flavours)**
 - **And thus indirectly the network equipments**
 - **Then Solaris**
 - **Then AIX**
 - **Then HP-UX, then, then....**
- ☐

Why to use puppet?

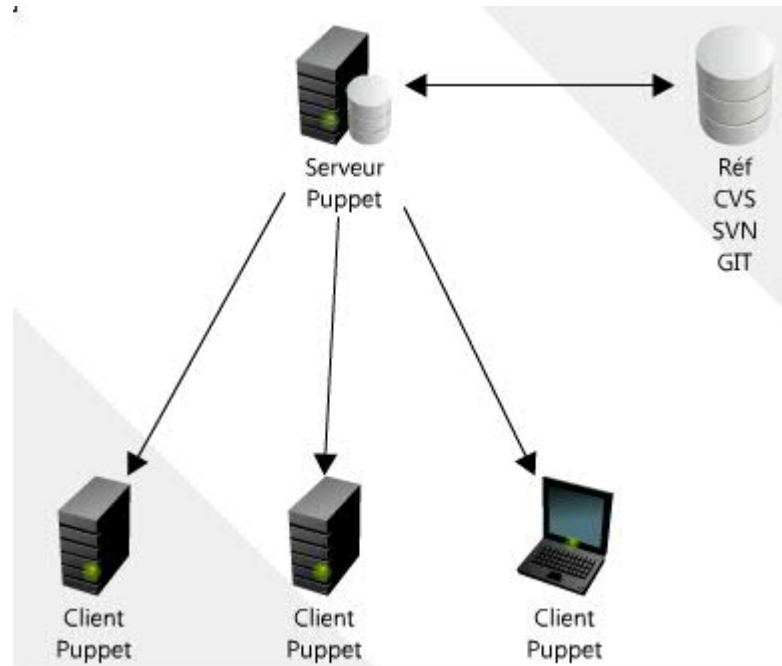
- ☐ **What do I need to run puppet**
 - **Ruby**
 - **Facter**
 - **And.... Puppet**
- ☐ **Puppet is by default on RedHat 7 and Solaris 11**
- ☐

Puppet architecture

Puppet architecture

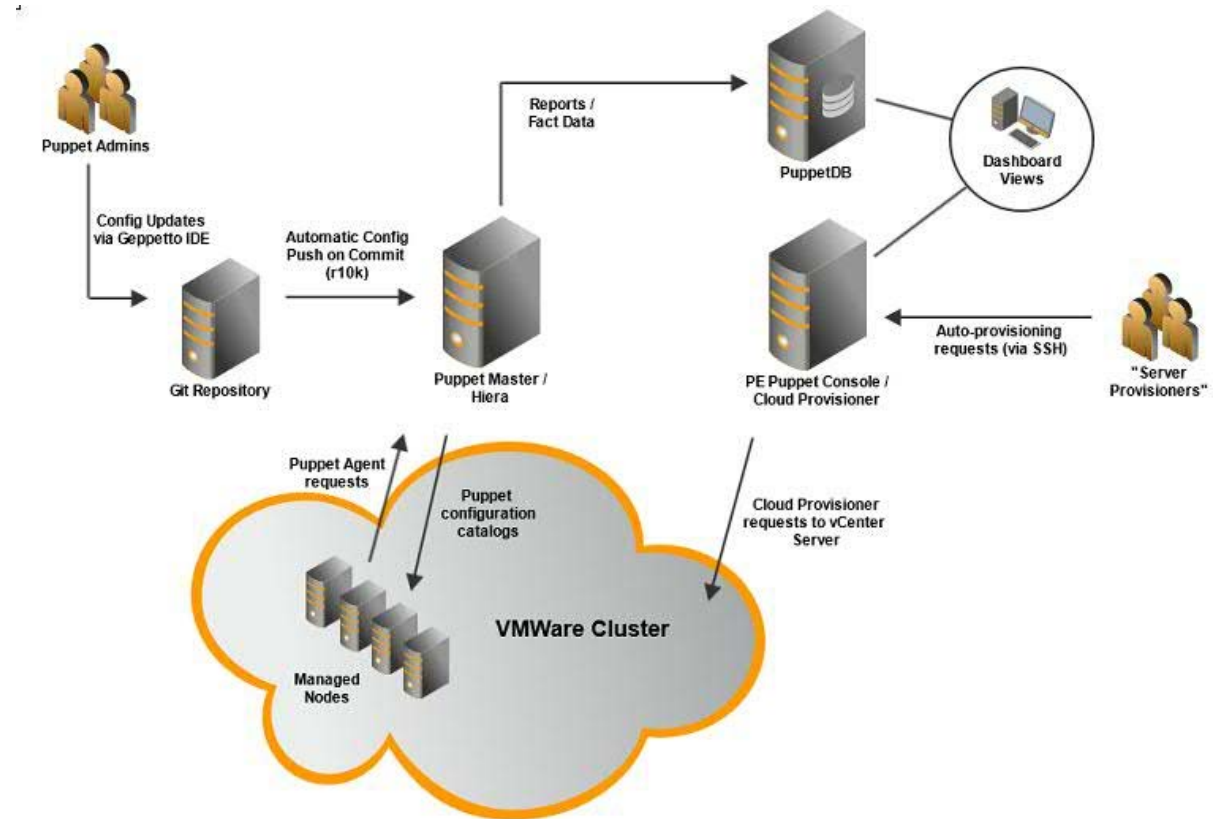
❑ Master ↔ agent architecture

-



Puppet architecture

❑ Real life architecture



Setup time?

How long does it take to setup puppet

☐ Let's demo it

-

How long does it take to setup puppet

☐ **Different ways to run puppet**

- **Daemon**
- **One time execution**
- **Planned executions**
-

Puppet in IBM

Puppet in IBM

- ❑ **Puppet is not owned by IBM. Chef vs puppet**
- ❑ **.... nevertheless, IBMers use it**
 - **Code is done to better integrate AIX:**
 - **Integration of modules (I.e code) around VG, LV and FS management (Lab in Egypt)**
 - **It is part of the architecture infrastructure of a brand new customer**
 - **VRA → PowerVC → Puppet**
 - **Personally: in use since 2011 for banking customer**
 -

Some examples

Some examples

- ☐ **Installation of package**
- ☐ **SSH management**
- ☐ **Deployment of IHS (IBM HTTP Server)**
-

Puppet code structure

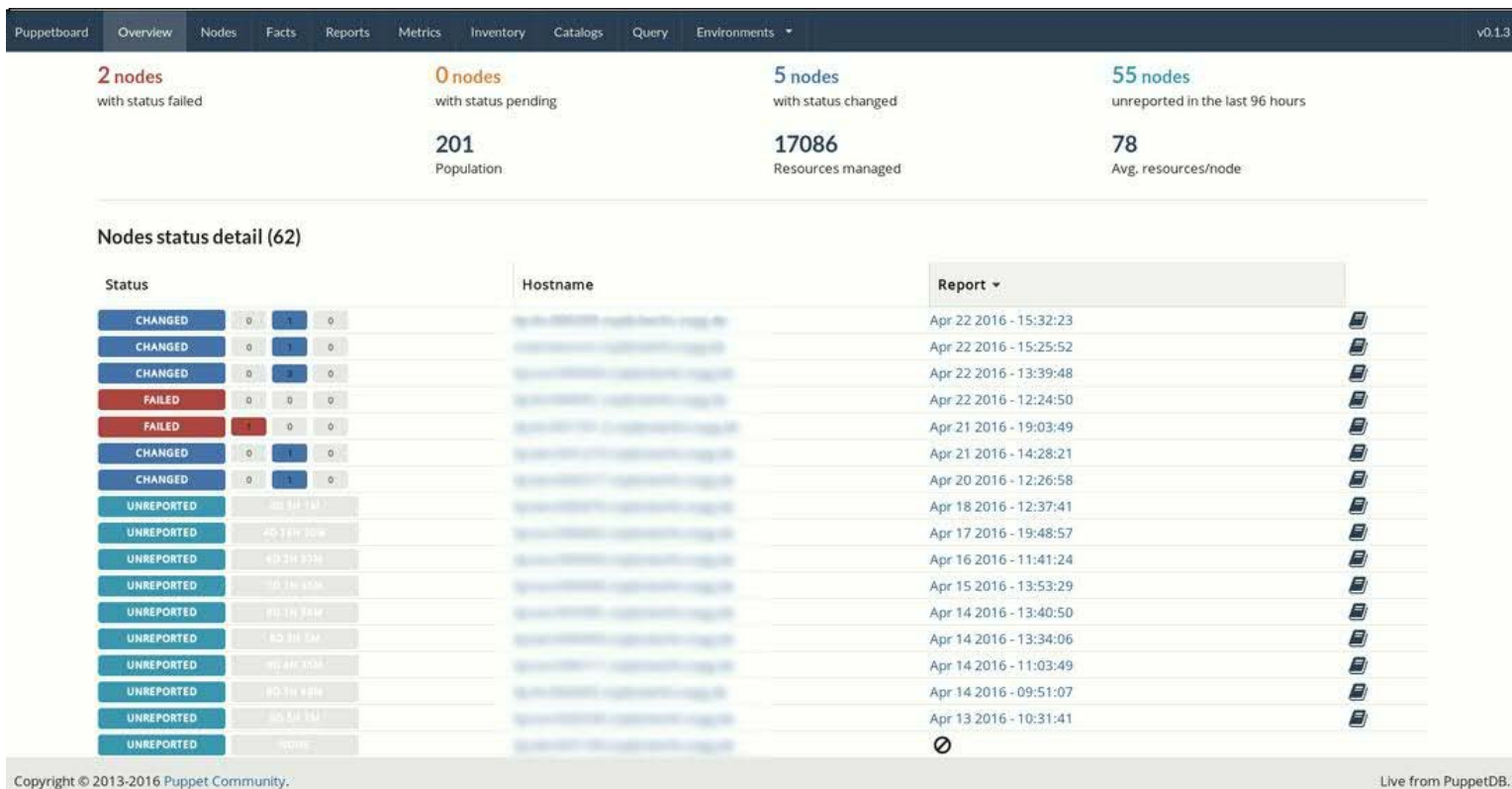
Puppet code structure

- ☐ **Module → classes → references**
- ☐ **Node definition (your puppet agent name)**
 - **Define what classes I can run on my agent**
- ☐ **Some examples of codes**
 -

Around puppet

Around puppet

☐ Puppet dashboard



Around puppet

❑ Foreman to integrate puppet

