David O'Brien

Using Ansible for your Windows Configuration Management

Introduction

- Senior DevOps Engineer
  - Monitor Consulting
    - Cloud / Virtualization / Automation
- German – Scottish
  - From Melbourne / Australia
- Twitter: @david_obrien
- http://www.david-obrien.net
- PowerShell / CDM MVP
- Author for PowerShell Magazine
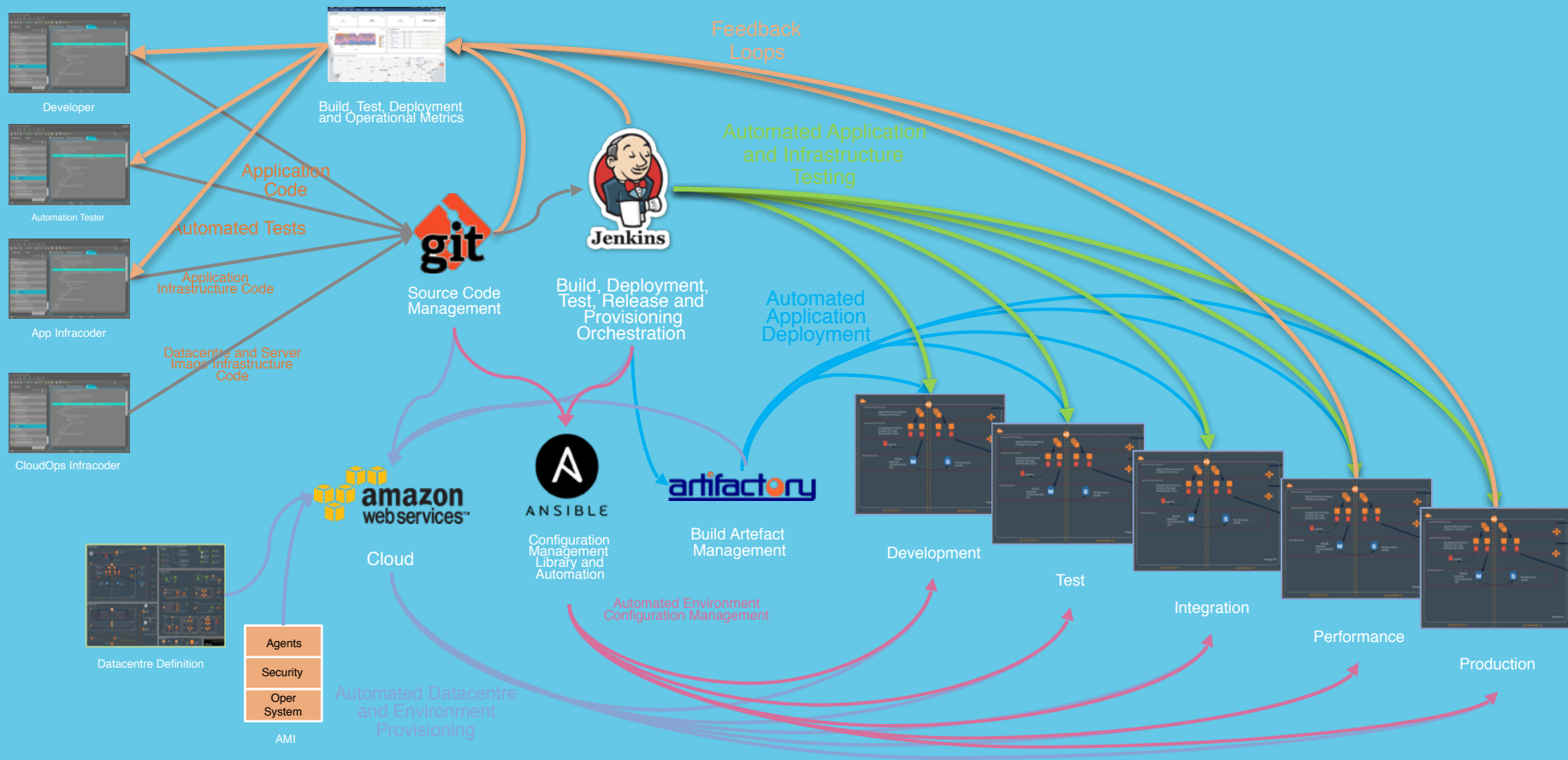- Github: https://github.com/davidobrien1985

Agenda

- What is DevOps (not)?
- Why is xPlatform important?
    - Who does it?
- Ansible
- How to execute PowerShell from Linux
- How to use PowerShell in Ansible
- How to write Ansible modules

What is DevOps (not)?

- It's a mindset that gets applied to your team(s).
- It helps making your teams more agile.
- Not a product!!!!!!!!!!!!! (you don't engineer DevOps)
- Not a silver bullet!

Why is xPlatform important?

- Why is it hard?
    - Linux != Windows and Windows != Linux
- Why is it important?
    - Environments today are very heterogeneous
    - Applications have frontends on Windows and backends on Linux
- One tool to rule them all

Developer

Automation Tester

App Infracoder

CloudOps Infracoder

Build, Test, Deployment and Operational Metrics

Feedback Loops

Application Code

Automated Tests

Application Infrastructure Code

Datacentre and Server Image Infrastructure Code

Source Code Management

Build, Deployment, Test, Release and Provisioning Orchestration

Automated Application and Infrastructure Testing

Automated Application Deployment

Cloud

Configuration Management Library and Automation

Build Artefact Management

Development

Test

Integration

Performance

Production

Datacentre Definition

Agents

Security

Oper System

AMI

Automated Environment Configuration Management

Automated Datacentre and Environment Provisioning

OSLO SPEKTRUM
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Ansible

- Configuration Management Tool
- Python
- Management Host – Linux
- Target Hosts
  - Linux and Windows
  - Modules for all sorts of Cloud Providers available
- Agentless
  - Pull mode still possible
- YAML

```
---
- name: Create temporary deploy Directory
    win_file:
    path: "C:\\deploy"
    state: "directory"
- name: Download dotNet 4_5 Full Download.exe
    win_get_url:
    dest: "C:\\deploy\\dotNet 4_5 Full Download.exe"
    url: https://webserver/dotnet.exe
    force: no
- name: Install dotNet 4.5
    win_dotnet:
    src: "C:\\deploy\\dotNet 4_5 Full Download.exe"
    version: '4'
```

DEMO

Thank you!

```
PS C:\Users\vagrant> class speaker
{
    [string]$firstname
    [string]$lastname
    [int]$age
    [string]$email
    [string]$url
    [string]$twitter

    speaker (
        [string]$firstname,
        [string]$lastname,
        [int]$age,
        [string]$email,
        [string]$url,
        [string]$twitter
    )
    {
        $this.firstname = $firstname
        $this.lastname = $lastname
        $this.age = $age
        $this.email = $email
        $this.url = $url
        $this.twitter = $twitter
    }
}
PS C:\Users\vagrant> [speaker]::new('David',"O'Brien",30,'me@david-obrien.net','http://www.david-obrien.net','@david_obrien')


firstname : David
lastname  : O'Brien
age       : 30
email     : me@david-obrien.net
url       : http://www.david-obrien.net
twitter   : @david_obrien
```