

# Instant ColdFusion with Vagrant



# Introduction

- Trip Ward
- Senior Technical Specialist at ICF
- Coder
- Multiple projects/Multiple Teams
- Work in teams of 1-5 developers

# Agenda

- What is Virtualization, What we are covering
- Old Way of doing things
- Why Leverage Vagrant and ColdFusion Together
- How do we set it all up
- Creating a VM
- Accessing aVM
- ColdFusion Development Against Your new VM

# What is Virtualization, We're Covering

- Separate computer inside of a computer.
  - OS, IP address, users, groups, files, etc
  - Host and guest, can communicate with each other
- Windows platform
  - Found very little discussion/tutorials
- Base Set of Tools
  - VirtualBox
  - Vagrant
  - Windows Server
  - IIS
  - ColdFusion 11

# Old Process Setting up Workstation/Server

- Same steps over and over
- Document based instructions
- Many hours
- Often multi team in the case of servers
- Subtle differences even on the same platform
- Human error prone/troubleshooting
- Different platforms on team/elevated environments
- Polluting workstation with different versions of software



# Introducing a Better Way

- Build (mostly) Scripted Vagrant Image
  - Pick your platform
  - Provisioning/Install All Required Software
  - Configuration settings
- Immediate Benefits
  - Repeatable and verifiable
  - Once a week, Once a month, Once a year
  - Abstracts complexity out of set up

# Installing Virtual Box and Vagrant

- Download/Install VirtualBox
  - Free
  - VirtualBox providers are bundled with Vagrant
  - Used as demonstration in documentation
  - Preferences, Save Location, Windows Images Large
- Download/Install Vagrant
- Plug Ins
  - vagrant plugin install vagrant-vbguest
- Gather Resources/Provisioners
  - Silent/Unattended Install scripts
  - Download CF installer
  - IIS modules
  - .car files

# Creating a New VM

- Create new folder - /testVM
  - If you use eclipse, probably in workspace
- Check out project code to folder - /testVM/website
  - Make the directory name something generic such as /website it makes the provisioners much easier to duplicate
  - Check out code to /website
- Open command prompt in /myProject
  - Shift + right click
- Type `vagrant init`
  - Creates vagrant file
- Create /testVM/provisioners
  - Modify vagrant file
  - Add provisioners
    - .cmd, .ps1
    - Write/Borrow
- Type `vagrant up`
  - Watch console



# Vagrant File

- Vagrant up demovm
- Review vagrant file
  - Provisioners
  - Local ip range
  - Install\_cf.cmd

# Accessing Your VM

- From Guest
  - VM Desktop
    - IIS Modules
  - ColdFusion Admin - <http://localhost:89>
    - Deploy .car file
    - C:\vagrant\demovm.car
  - Project Code - <http://localhost>
- From Host
  - Add host entry with the IP from vagrant file and the URL
    - 192.168.33.10 demoVM.loc

# ColdFusion Development Against Your new VM

- Develop as you do today
- Code on local
- IDE of choice
- Confidence when switching projects

# Things to note/ Out of Session Scope

- Docker
  - Not mutually exclusive from vagrant
- Linux, Unix/Solaris, OSX
  - “ix” platforms are significantly easier to implement and maintain
  - Many more resources/tutorials out there - See last slide for resources
  - Concepts are the same
- Chef/Puppet
  - All great tools but out of scope for the discussion
- Creating Base boxes

# Why Leverage Vagrant and ColdFusion

- How will virtualization help me build robust ColdFusion Applications
  - Simplifies building out local environments - Saves time and patience
  - Closely mimic elevated environments - better chance of same behavior
  - Repeatable, Verifiable - e.g. Spin up new VM for load testing
  - Vagrant file, provisioners updates, Stored in source control
  - Distributable, Team Environments - Everyone runs on same environment
  - Create isolation between CF instances - e.g. No mapping collisions
  - Work on projects running on older versions of CF
  - Take new versions of CF for a test drive - No longer chore to test code on different versions of CF



# Resources

- <https://www.vagrantup.com/docs/>
- <https://atlas.hashicorp.com/boxes/search>
  - Plug ins
- <https://github.com/tripward/presentations/tree/master/vagrant>
- <https://helpx.adobe.com/coldfusion/installing/installing-coldfusion-silently.html>

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# Vagrant File

- Automatically created
- Syntax is Ruby
  - Ruby knowledge is not required
  - Mostly variable setting
- Local network IP Address
- Synched Folders
  - Automatically get c:\vagrant on guest
  - /website
    - Must use sym link with sharing