

#ANSIBLEFEST2019

Adventures with Ansible: The Automation Journey

John Wadleigh - Architect (Red Hat)

* ansiblejunky.com

* jwgallery.org

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Michael Tam - Tech Lead (HCSC)



ANSIBLE

Share your automation story

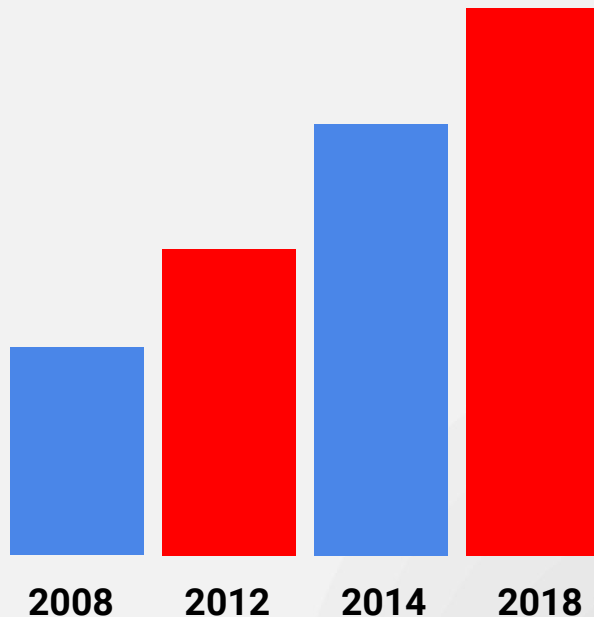
1. How did you get started with Ansible?
2. How long have you been using it?
3. What's your favorite thing to do when you Ansible?

```
---  
- hosts: hilton_conference_rooms  
  gather_facts: false  
  
  tasks:  
  - include_role:  
    name: ansiblefest_breakout_session  
  vars:  
    name: >  
      Adventures with Ansible:  
      Automation Journey  
    state: started  
    speakers:  
      - John Wadleigh  
      - Ajit Jain  
      - Michael Tam
```

THE “WHY”?

Why companies are looking to change how they work

- What's the problem?
 - Maintenance costs
 - Complex manual processes become even more complex
 - Investments into outdated technology
 - Technical debt
 - Instability



THE “WHY”?

Why companies are looking to change how they work

- Impact can be large
 - Employees
 - Everything is needed TODAY
 - They become “heroes”
 - They become “firefighters”
 - “No time” for innovation
 - Financial
 - Relevance



THE “WHY”?

Why companies are looking to change how they work

- The good news?
 - We are not alone!
- It's an international problem:
 - Mexico, Germany, USA, Norway, Italy, France, Netherlands
- So what's the solution?



SOLUTION?

A **Red Hat**
Ansible
Automation +

Cultural
Transformation

All in the same boat,
sailing in the same direction

“The time is always right
to do what is right.”

- *Martin Luther King, Jr.*

KEEP IT SIMPLE

Simplicity is the key to success

- Too much too soon
- Automate something small with high impact and high value
 - Minimum Viable Product (MVP)
- Don't try to be perfect
 - Try something today
 - Change it tomorrow, if needed

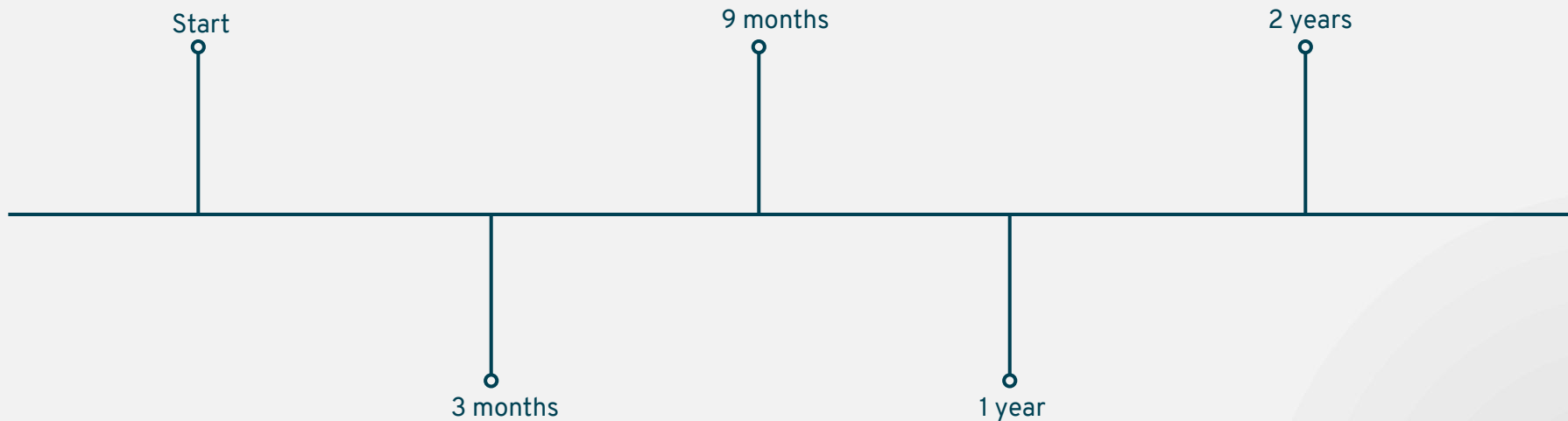
STARTING

Define your team

- Vision and Goals - “Sailing in the same direction”
- Roles and Responsibilities
 - *Automation Engineers*
 - *Scrum Master* is a real job!
 - *Product Owner* - who sets priorities?
 - Methodology? Scrum, Kanban, or custom
- Key stakeholders - setup recurring meeting

VISION

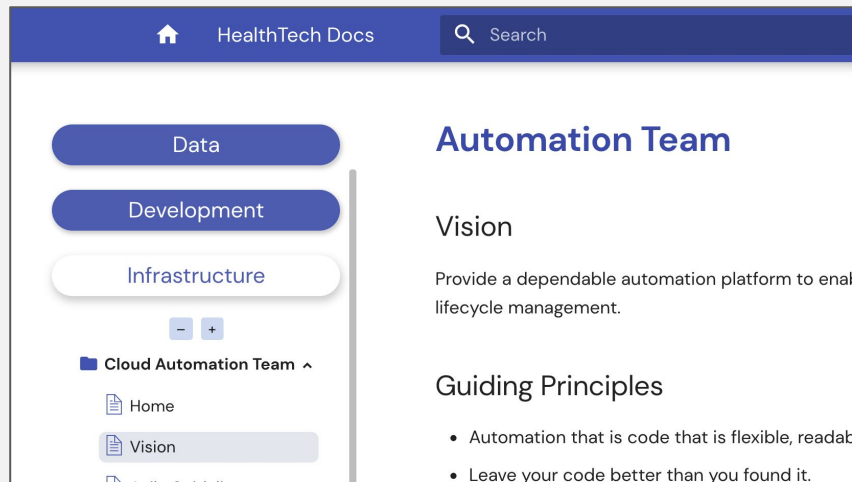
Define your major milestones and long term vision



DEFINE YOUR WORLD

Define it and share it!

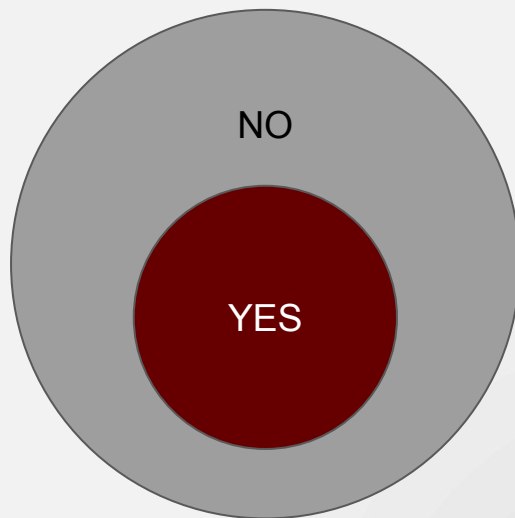
- Documentation landing site
 - Vision and Goals
 - Roles and Responsibilities
 - Best Practices
 - Automation standards
- Share it, test it, and improve it
- Start simple, then expand over time



DEFINE YOUR WORLD

Define it and share it!

- Saying “No” - Now you can!
- Saying “Yes” means “YES!”
 - Be accountable
 - Be honest (with others)
 - Be honest (with yourself)
- Reduce distractions
- Produce stability in common processes



WHAT IS AUTOMATION?

What is it that we are doing?

- Everyone has their own definition
- Understand the 80/20 rule:
 - Automating 80% of your tasks will be easy.
 - However, 20% of your tasks will be challenging.
- Define what it means for your team (team activity)
 - “Definition of Done”
- Document it and share it! Helps with:
 - Defining User Stories, Story Points, Complexity, etc.
 - Onboarding more teams with Ansible

WHAT IS AUTOMATION?

What is it that we are doing?

- Example: “Application is automated!”

[A] “Application is deployed without human intervention”

[B] “Application is deployed using Ansible”

[C] “Ansible code written, unit tests written, configuration stored in inventory, tested locally, best practices are met, tested in Ansible Tower with CI pipelines, and deployed to Production”

[D] All of the above

SHOW VALUE

How is automation bringing value to your team and organization?

- Create “quick wins” (seeds)
- Plant the seeds: Demos and Repeat
- Establish automation reports
- Work With Key Stakeholders to Gain Consensus
- Automation Evangelist
 - Marketing automation concepts to organization
 - Sells automation to other teams via demos, talks, etc.
 - Can be full time job!

COMMUNICATE

Talk, talk, talk

- It starts with your own team!
 - Open-door policy (sort of)
 - Get up and walk over to the team
 - Team activities (enforcing collaboration, trust, etc)
- Breaking down the “wall of confusion”
 - Different priorities
 - Different budgets
- Meetings, Demos, After-Work, etc.
- Change doesn't happen by emails alone



FEEDBACK LOOP

Iterative design

- **Fail fast, fail early**
 - Failure in Prod can be very costly
 - Scalable functionality (dev->test->prod)
 - Mocking functionality if necessary
- **Celebrate your mistakes (=> learning!)**
 - Talk about them and demo them!
- **Blame the system, not the user (exposes vulnerabilities)**

FEEDBACK LOOP

Iterative design

“I can never find the things that work best until I know the things that don’t work.”

“I have not failed. I’ve just found 10,000 ways that won’t work.”

Thomas Edison

CRAWL, WALK, RUN, SAIL

It's not how fast you go but where you go.

- Do not try to automate everything right away
- What can be done in this 2 week sprint?
- How can we be better in the next sprint?
- Are we “sailing in the same (right) direction?”



PAIN

Pain is a natural side-effect of change

- Understand your current pain-points
- Allow pain
 - Don't promote heroes!
 - Bring the pain forward
- Automation will expose pains (those you were unaware of)
- Systemic change requires patience and persistence

DEMOCRACY

We the people ...

- **Allow the team to have a voice**
 - Retrospective (post-Sprint)
 - Grooming (pre-Sprint)
 - Demos (within-Sprint)
 - User Stories
 - Allow disagreement
- **Allow other teams to have a voice**
 - Invite people to represent their User Stories in Grooming sessions
- **However, Product Owner has final decision**

HIRING

Bringing the talent you need

- Re-evaluate your company's hiring process
- Look for soft skills
 - Desire for change!
 - How do you think? Problem solving skills
 - How do you feel on manual processes? Automate everything!
- Look for tech skills
 - Ansible is nice-to-have, but not critical
 - We can teach you Ansible!
- Explain “why automation”?
- Interview process

HOW CAN RED HAT HELP?

Helpful resources to support your journey

- [Red Hat Automation Adoption Program](#)
Provides framework for managing an organization-wide automation adoption journey.
- [Red Hat D0500 Course](#)
One week intensive immersive experience in DevOps culture, modern software development practices, and modern application development architectures.
- [Red Hat Training / University](#)
- [Red Hat Consulting Services](#)
- [What is The Open Organization?](#) (OpenSource.com)
- [A non-technical guide to DevOps using TED Talks](#)

FINAL WORDS



Questions?

 **Red Hat**
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+

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THANK YOU



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