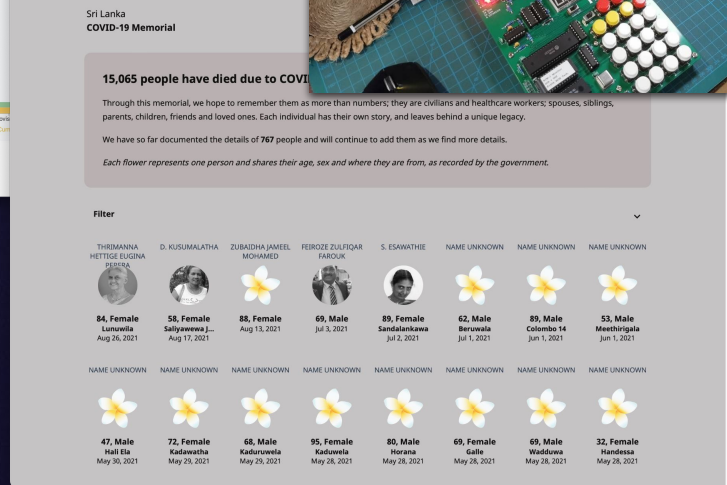
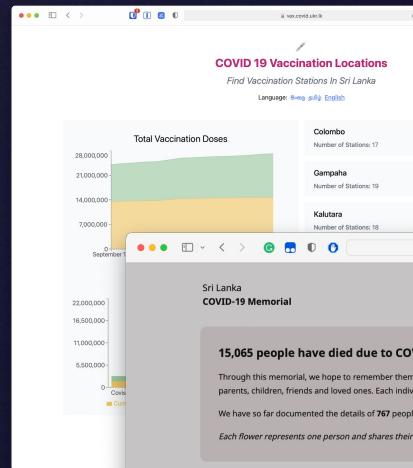


ANSIBLE FOR DEVELOPERS



About Me

- ◆ Associate Technical Lead at Dual Inventive.
- ◆ Previous stints at YAMU, WSO2 and Gradient.
- ◆ Full stack developer with focus on rapid app development.
- ◆ Computer hobbyist, I build stuff for fun, or sometimes for common good.



Talk Outline

- ◆ Introduction to Ansible.
- ◆ Ansible for developers.
- ◆ Ansible 101 — *Architecture & terminology*.
- ◆ Automation demos — *Setting up a “secure” web server*.
- ◆ Further learning resources.



Introduction to Ansible

- ♦ **Open Source** tool to simplify configuration and management of IT infrastructure.
- ♦ **Declarative** define the desired state of the system in YAML rather than writing procedural code.
- ♦ **Agentless**, operates over SSH thus lightweight without requiring additional dependencies.



Ansible for Developers

- ◆ **Efficiency** via automation of repetitive task improving productivity.
- ◆ **Collaboration** and reproducibility using version control.
- ◆ **Catalyst for DevOps** culture in your organization.

HOW LONG CAN YOU WORK ON MAKING A ROUTINE TASK MORE EFFICIENT BEFORE YOU'RE SPENDING MORE TIME THAN YOU SAVE?
(ACROSS FIVE YEARS)

		HOW OFTEN YOU DO THE TASK					
		50/DAY	5/DAY	DAILY	WEEKLY	MONTHLY	YEARLY
HOW MUCH TIME YOU SHAVE OFF	1 SECOND	1 DAY	2 HOURS	30 MINUTES	4 MINUTES	1 MINUTE	5 SECONDS
	5 SECONDS	5 DAYS	12 HOURS	2 HOURS	21 MINUTES	5 MINUTES	25 SECONDS
	30 SECONDS	4 WEEKS	3 DAYS	12 HOURS	2 HOURS	30 MINUTES	2 MINUTES
	1 MINUTE	8 WEEKS	6 DAYS	1 DAY	4 HOURS	1 HOUR	5 MINUTES
	5 MINUTES	9 MONTHS	4 WEEKS	6 DAYS	21 HOURS	5 HOURS	25 MINUTES
	30 MINUTES		6 MONTHS	5 WEEKS	5 DAYS	1 DAY	2 HOURS
	1 HOUR		10 MONTHS	2 MONTHS	10 DAYS	2 DAYS	5 HOURS
	6 HOURS				2 MONTHS	2 WEEKS	1 DAY
	1 DAY					8 WEEKS	5 DAYS

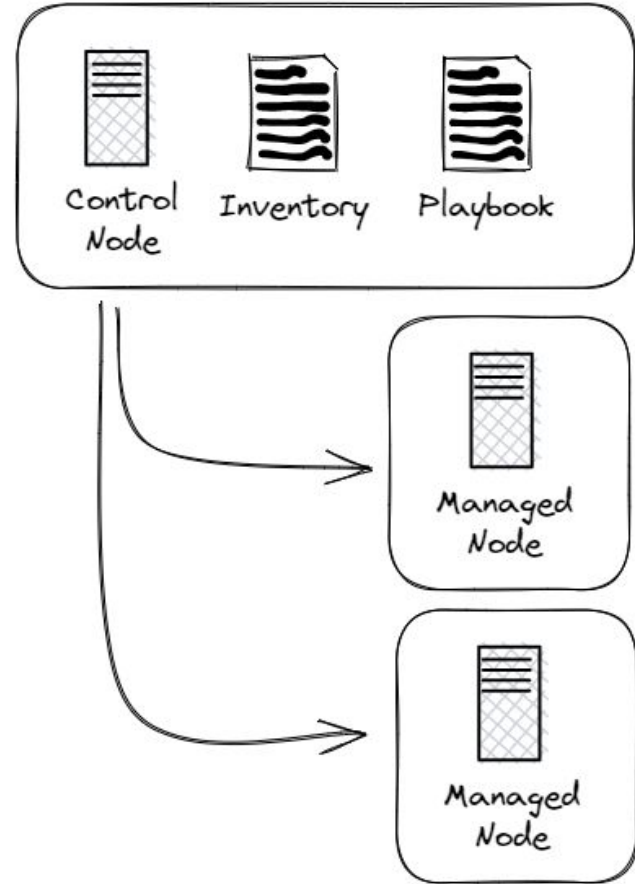


ANSIBLE 101



Architecture

- ♦ **Control Node** the host machine executing automation tasks.
- ♦ **Inventory** file that defines the managed nodes
- ♦ **Playbook** automation tasks defined in YAML.
- ♦ **Managed Node** systems that are managed and controlled by Ansible.



Essential Terminology

- ♦ **Playbook** contains set of plays written in YAML
- ♦ **Plays** are the main execution context mapped to managed nodes.
 - ♦ **Tasks** — unit of work to be applied to nodes.
 - ♦ **Handlers** — special form of a task, triggered on changed task.
 - ♦ **Roles** — definition of reusable ansible content.
- ♦ **Collections** are distributed ansible content which contains playbooks, roles and modules. Installed through the Ansible Galaxy.



AUTOMATION DEMOS



Further Learning Resources

- ♦ **Ansible Documentation** — docs.ansible.com
- ♦ **Ansible Galaxy** — galaxy.ansible.com
- ♦ **Free Online Courses**
 - ♦ [Ansible 101](#) by Jeff Geerling on YouTube
- ♦ **Demo Source** — [Github kaveenr/gapstars-ansible-for-devs-talk](https://github.com/kaveenr/gapstars-ansible-for-devs-talk)

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THANK YOU

