

Writing Ansible Roles



JP Toto

INFRASTRUCTURE DEVELOPER

@jptoto <http://jptoto.jp>



State of Things

```
$ dir
```

```
index-01.html  
index-02.html  
index.html  
webserver_playbook.yaml  
webserver_playbook_conditionals.yaml  
webserver_playbook_linux.yaml  
win_copy_playbook.yaml
```

Ansible Roles to the Rescue



Roles help organize all the files and folders of your code



Pre-defined conventions of folders and files



No special project files, just folder conventions



Ansible Role Folder Structure

rolename

- meta

 - main.yaml



- tasks

 - main.yaml



- vars

- templates

- files

- defaults



The Meta Folder



Descriptions of the role, dependencies, Ansible Galaxy information



Information about what roles this one depends on



Do we need to run a role before this one



The Tasks Folder



Primary entry for the actions to start happening



Same format as typical tasks in a playbook



Can have multiple task files included



Other Ansible Role Folders

rolename

- meta

- tasks

- vars

- templates  Templated configuration recipes

- files  Hold files that need to be copied to hosts

- defaults  Good for variable defaults with overrides



Demo

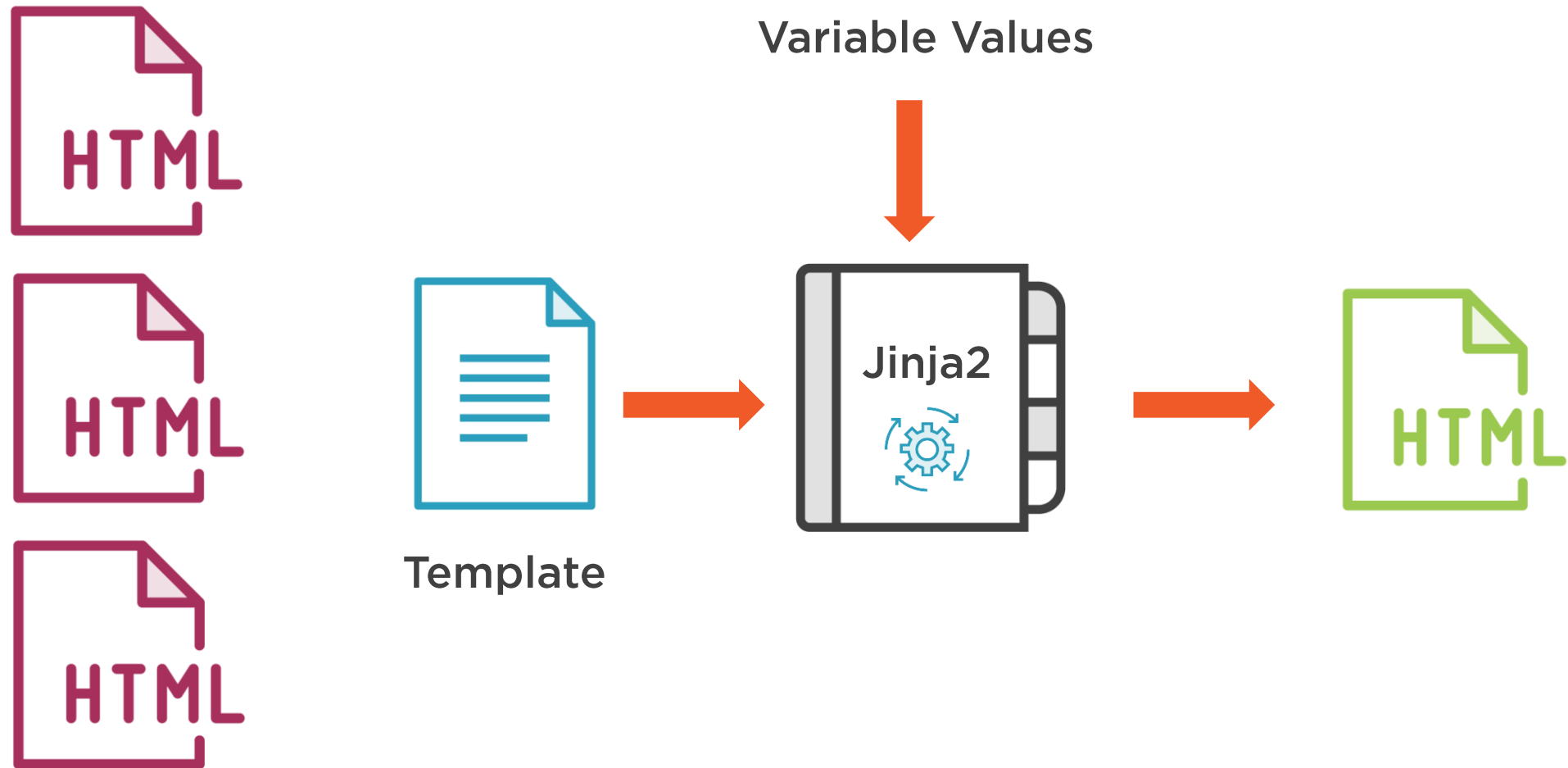


Let's reorganize our playbooks into roles

Ansible roles helps keep our plays, files,
and configuration in predictable places



Ansible Templates with Jinja2



Templates for Globomantics?



What if developers want to add more web servers?



We'd have to generate an awful lot of index-0X.html files



Let's use ONE template instead



Demo



Simply index.html file storage and copying

We'll replace that with a template



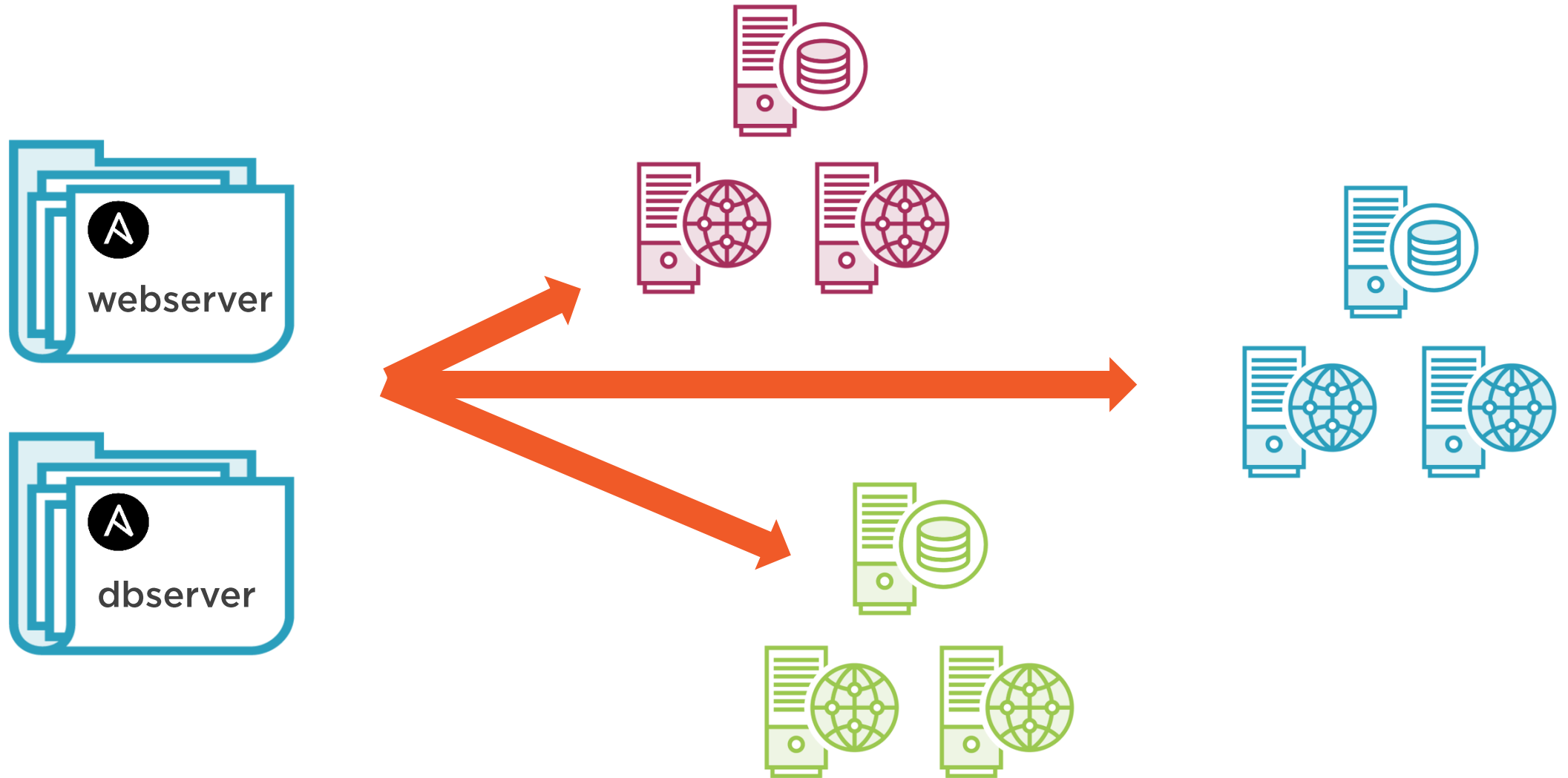
Demo



Create our last role, the database server
We'll use the `win_chocolatey` module



Congratulations!



Summary



Roles help organize playbooks and Ansible configuration

Retooled the webserver playbook into a role

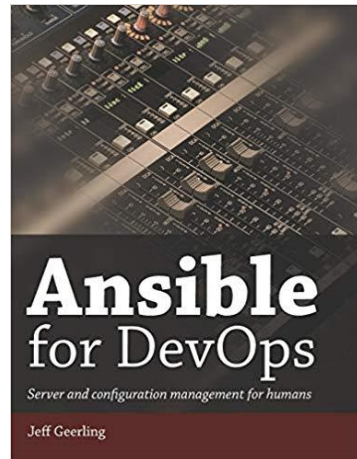
Created a database role



Further Reading



<https://docs.ansible.com/>



Ansible for DevOps by Jeff Geerling

<https://www.ansiblefordevops.com/>



Ansible Versions



This course: Ansible 2.9.1



Ansible maintains compatibility



All examples should work well into the future



Thank You!



Thank you for watching this course!
Check out the discussions section.
Good luck!

