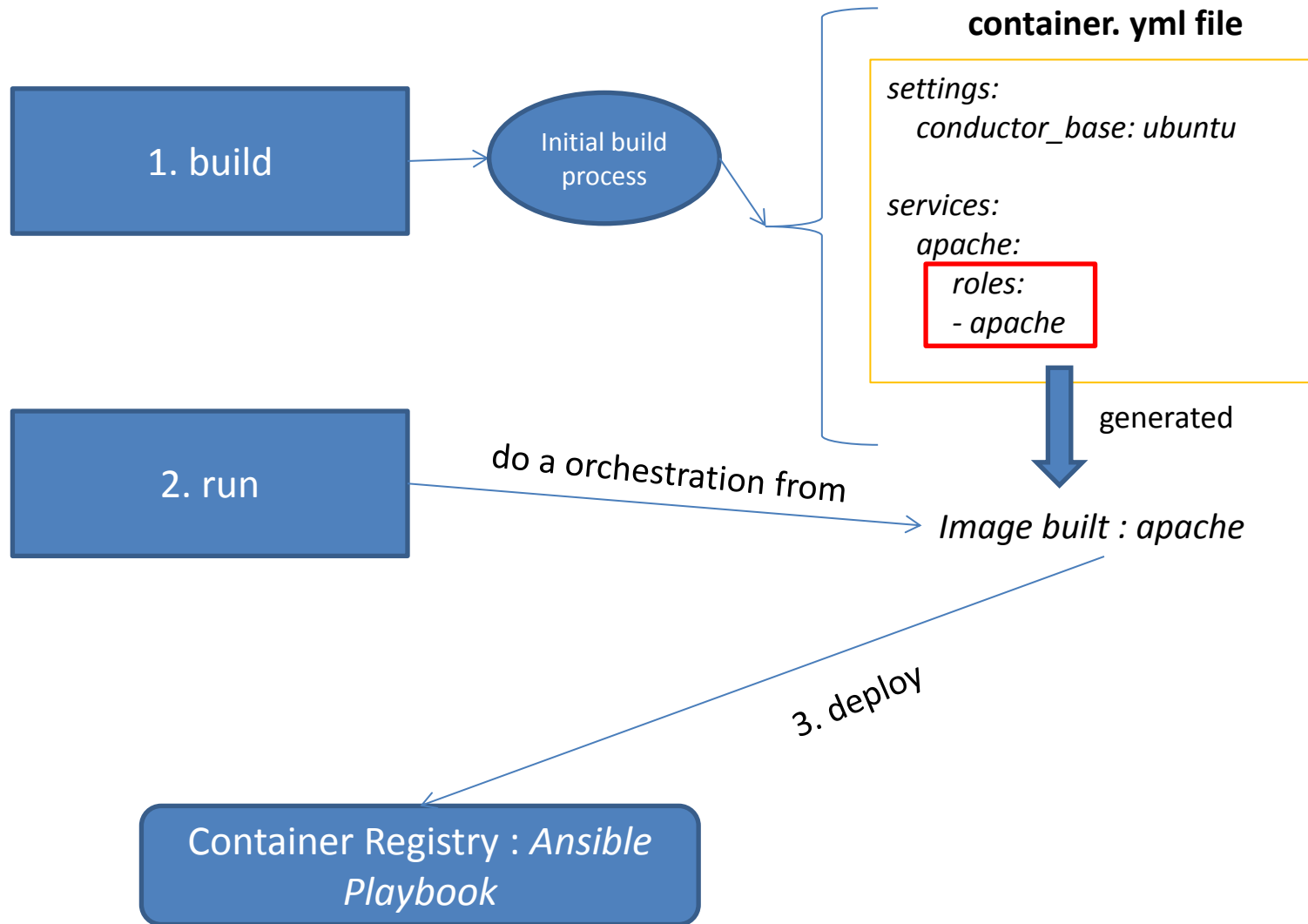# From Dockerfiles to Ansible-container

WP2 - STAMP PROJECT
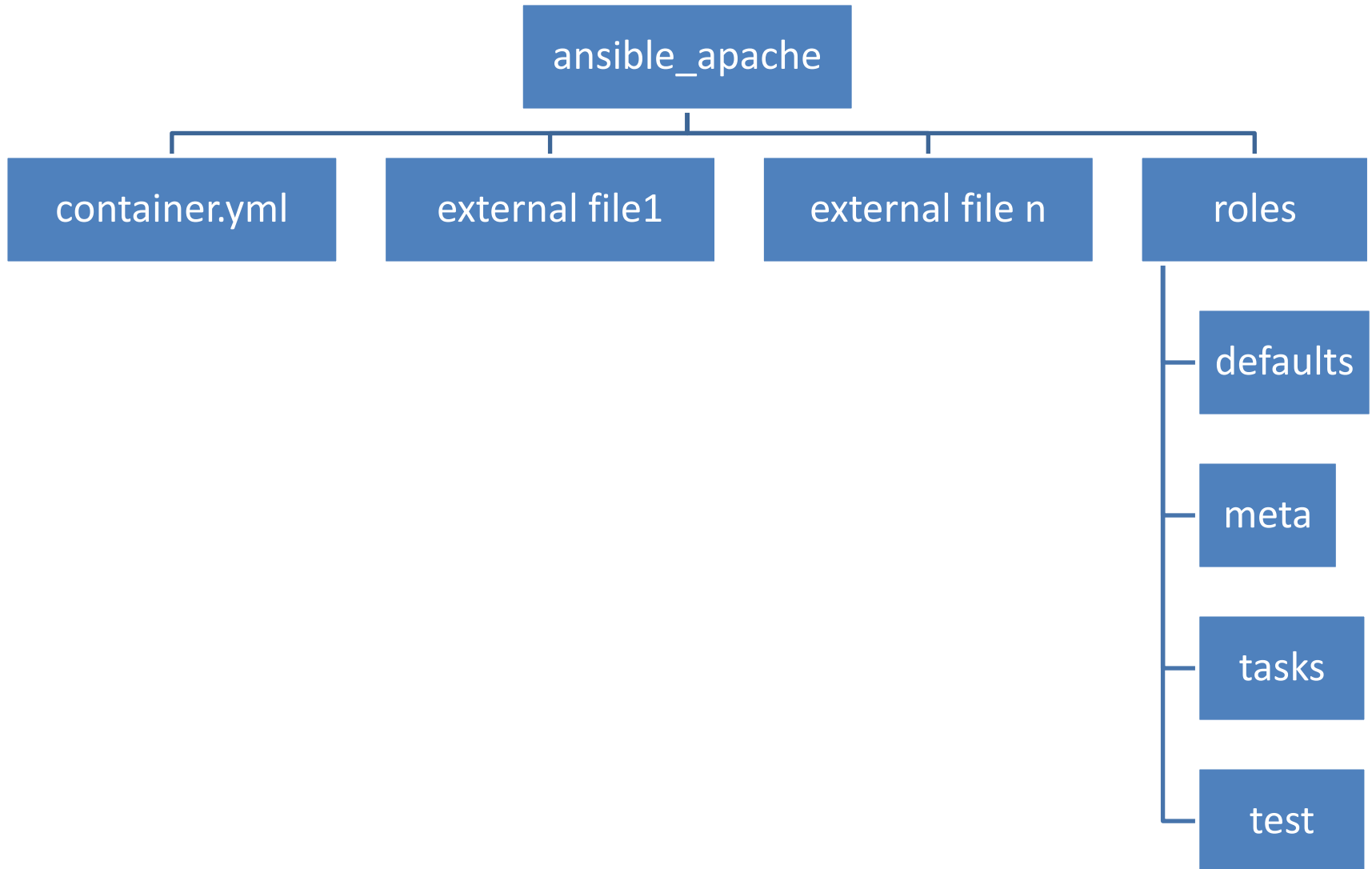
fernando.mendez@atos.net

1. Ansible container functionality

container. yml file

1. build → Initial build process →

```
settings:
    conductor_base: ubuntu

services:
    apache:
        roles:
        - apache
```

generated

2. run

do a orchestration from →

Image built : apache

3. deploy

Container Registry : *Ansible Playbook*

2. Project folder

3. Dockerfile

settings:
  conductor_base: ubuntu

ARG VERSION latest
FROM ubuntu: $VERSION

MAINTAINER Fernando Méndez Requena - fernando.mendez.external@atos.net

#Update the repository sources list
RUN apt-get update

#Install and run apache
RUN apt-get install -y apache2 && apt-get clean

ENV DIR_APACHE=/apache
RUN mkdir $DIR_APACHE
WORKDIR $DIR_APACHE

#ADD mpm_prefork.conf $DIR_APACHE

RUN cd /etc/apache2/mods-available && \
    chmod 700 mpm_prefork.conf && \
    chmod 700 mpm_worker.conf && \
    echo "envsubst < $DIR_APACHE/mpm_prefork-template.conf > ./mpm_prefork.conf" \
    echo "envsubst < $DIR_APACHE/mpm_worker-template.conf > ./mpm_worker.conf"

EXPOSE 80

CMD apachectl -D FOREGROUND

4. Container.yml file

ansible-container **import** ../Dockerfile

- The import command creates a container.yml file that defines a single service named **apaches**

 - The container.yml file is your orchestration file that expresses what services you have and how to build/run them

settings:
 conductor_base: ubuntu
services:
 apaches:
   roles:
    - apache

Each of the containers you wish to orchestrate should be under the *services* key

- Each role you specify needs to be in a *roles/* directory in your project

5. Tasks/main.yml file

- Has **RUN/ADD/COPY** instructions found in the Dockerfile.

  – name: comment
  – sheel: commands

  Example:
  - *name: Install and run apache*
  - *shell: apt-get install -y apache2 && apt-get clean*

6. Meta/container.yml file

- Metada from Dockerfile:

  in /home/../ansible-container/ansible_apache/roles/meta

These will be used as build/run defaults for your role.

from: ubuntu
maintainer: Fernando Mendez Requena - fernando.mendez@atos.net
environment: DIR_APACHE: /apache
*working_dir: **"{{ lookup('env', 'DIR_APACHE') }}"***
ports:
* - '80'*
command: apachectl -D FOREGROUND

7. Defaults/main.yml

- The ARG vars from Dockerfiles becomes a variable in the role:

Example:

    playbook_debug: false

    VERSION latest: '~'