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Отчет по лабораторной работе №2  
«**Ansible + Caddy**»  
(«Администрирование компьютерных сетей»)

Выполнил:

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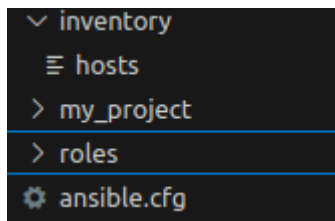
Проверил:

Самохин Н.Ю.

Санкт-Петербург

2024

1. Установил пакетный менеджер pip для нашего python
2. Установил, собственно, ansible: `python3 -m pip install ansible`
3. Добавил файлы `ansible.cfg` и `inventory/hosts`



4. Проверяем, что сервер с Ansible подключился к “клиенту” (в нашем случае это одна и та же машина, localhost): `ansible my_servers -m ping -c local` и/или `ansible my_servers -m setup -c local`

```
shelby@shelby-VirtualBox:~/Lr2$ ansible my_servers -c local -m shell -a 'echo test_file_content > $HOME/test.txt'
[WARNING]: Platform linux on host local_server is using the discovered Python
interpreter at /usr/bin/python3.10, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
local_server | CHANGED | rc=0 >>

shelby@shelby-VirtualBox:~/Lr2$ ansible my_servers -c local -m file -a 'path=$HOME/test.txt state=absent'
[WARNING]: Platform linux on host local_server is using the discovered Python
interpreter at /usr/bin/python3.10, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
local_server | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3.10"
  },
  "changed": true,
  "path": "/home/shelby/test.txt",
  "state": "absent"
}
```

5. Пробуем выполнить команду посложнее на нашем клиенте
  - a. Создаем текстовый файл с производным содержимым, через модуль `shell`: `ansible my_servers -c local -m shell -a 'echo test_file_content > $HOME/test.txt'`
  - b. Проверяем, что по нужному пути создан нужный файл с нужным именем и содержимым
  - c. Удаляем файл через модуль `file`: `ansible my_servers -c local -m file -a 'path=$HOME/test.txt state=absent'`

```

/Lr2 # ansible my_servers -c local -m shell -a 'echo test_file_content > $HOME/test.txt'
[WARNING]: Platform linux on host local_server is using the discovered Python interpreter at /usr/bin/python3.12, but
future installation of another Python interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
local_server | CHANGED | rc=0 >>

/Lr2 # ls -la ..
total 20816
drwxr-xr-x 21 root root 4096 Dec 19 21:43 .
drwxr-xr-x 21 root root 4096 Dec 19 21:43 ..
drwxr-xr-x 3 root root 4096 Dec 19 21:57 Lr2
drwxr-xr-x 2 root root 4096 Dec 17 15:06 bin
drwxr-xr-x 11 root root 3088 Dec 19 20:54 dev
-rwxr-xr-x 1 root root 18971760 Nov 13 13:16 docker-desktop-user-distro
drwxr-xr-x 20 root root 4096 Dec 19 21:49 etc
drwxr-xr-x 2 root root 4096 May 22 2024 home
-rwxrwxrwx 1 root root 2260248 Nov 9 16:26 init
drwxr-xr-x 8 root root 4096 Dec 17 15:06 lib
drwx----- 2 root root 16384 Dec 17 15:06 lost+found
drwxr-xr-x 5 root root 4096 May 22 2024 media
drwxr-xr-x 4 root root 4096 Dec 17 15:06 mnt
drwxr-xr-x 2 root root 4096 May 22 2024 opt
dr-xr-xr-x 334 root root 0 Dec 19 20:54 proc
drwx----- 5 root root 4096 Dec 19 22:02 root
drwxr-xr-x 10 root root 240 Dec 19 20:54 run
drwxr-xr-x 2 root root 4096 Dec 17 15:06 sbin
drwxr-xr-x 2 root root 4096 May 22 2024 srv
dr-xr-xr-x 11 root root 0 Dec 19 20:54 sys
drwxrwxrwt 5 root root 4096 Dec 19 22:02 tmp
drwxr-xr-x 8 root root 4096 Dec 19 21:49 usr
drwxr-xr-x 12 root root 4096 May 22 2024 var
/Lr2 # cat $HOME/test.txt
test_file_content
/Lr2 # ls -l $HOME/test.txt
-rw-r--r-- 1 root root 18 Dec 19 22:02 /root/test.txt
/Lr2 #

```

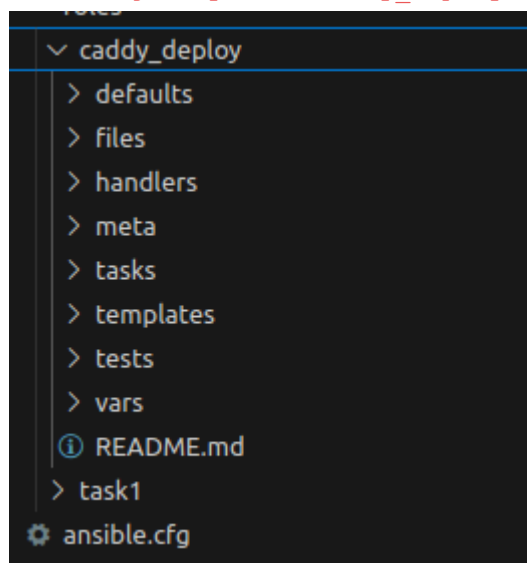
```

-rw-r--r-- 1 root root 18 Dec 19 22:02 /root/test.txt
/Lr2 # ansible my_servers -c local -m file -a 'path=$HOME/test.txt state=absent'
[WARNING]: Platform linux on host local_server is using the discovered Python interpreter
https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html
local_server | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3.12"
  },
  "changed": true,
  "path": "/root/test.txt",
  "state": "absent"
}
/Lr2 #

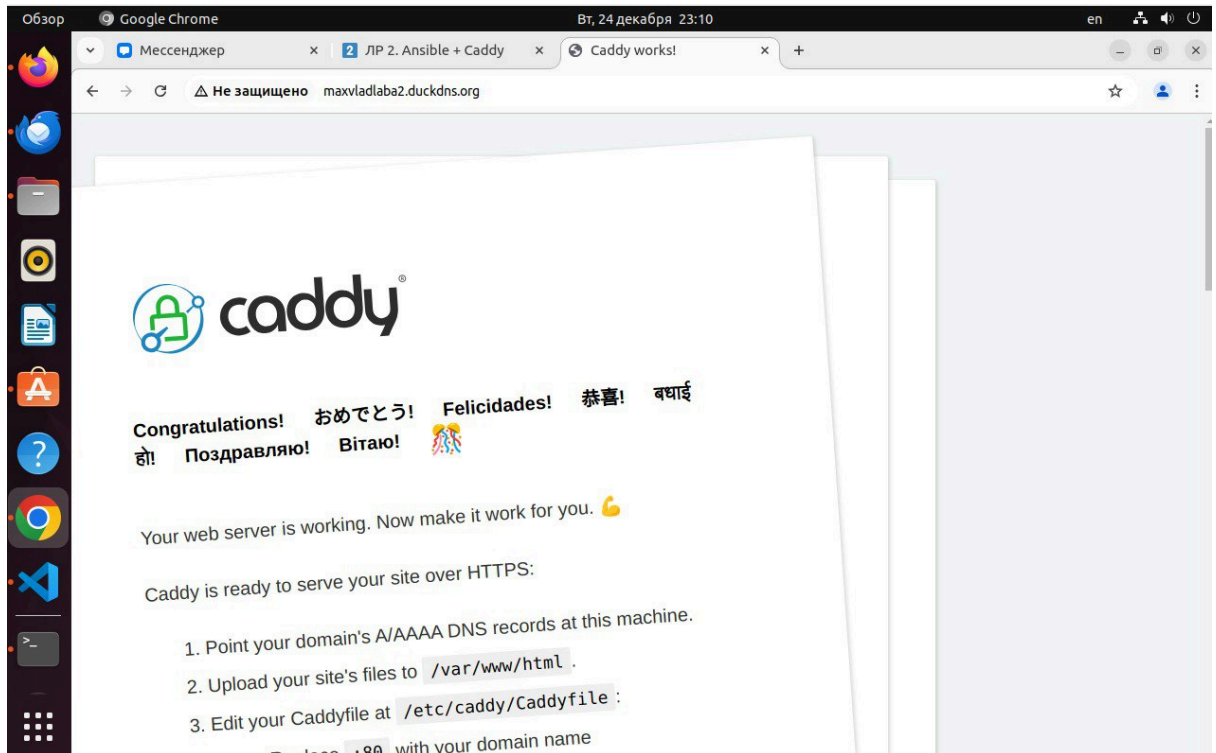
```

## 6. Инициализируем исходное конфигурационное “дерево”:

`ansible-galaxy init caddy_deploy`

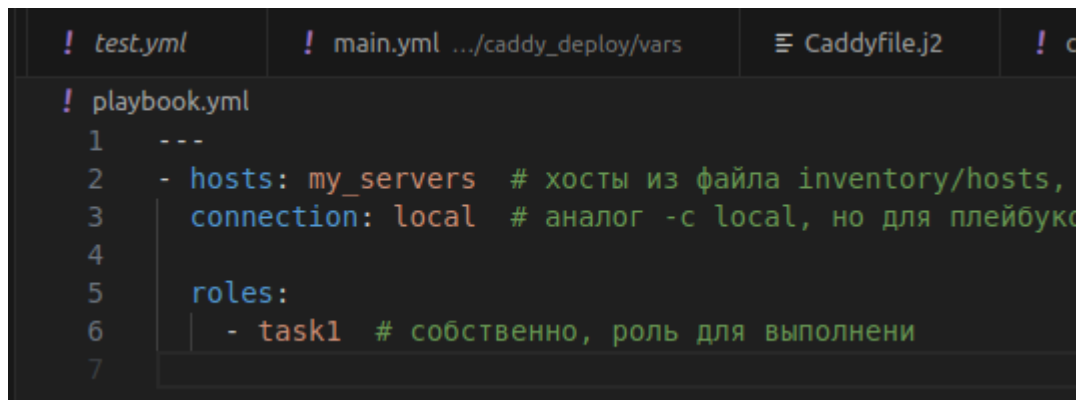


7. Заполним все файлы (main.yml в tasks, caddy\_deploy.yml и Caddyfile.j2)
8. Запускаем плейбук: `ansible-playbook caddy_deploy.yml`



Задание 1:

- 1) Создал playbook.yml



- 2) Изменил main.yml в task1

```
roles > task1 > tasks > ! main.yml
```

```
1
2 - name: Create a text file with content
3   shell: echo test_file_content > $HOME/test.txt
4
5 - name: Read file content
6   shell: cat $HOME/test.txt
7   register: output_file_content
8   tags: read_file
9
10 - name: Show file content
11   debug:
12     msg: "{{ output_file_content.stdout }}"
13   tags: read_file
14
15 - name: Change the content of the file
16   shell: echo new_file_content > $HOME/test.txt
17
18 - name: Read file content
19   shell: cat $HOME/test.txt
20   register: output_file_content
21   tags: read_file
22
23 - name: Show file content
24   debug:
25     msg: "{{ output_file_content.stdout }}"
26   tags: read_file
27
28 - name: Remove the text file
29   file:
30     path: $HOME/test.txt
31     state: absent
32
```

3)

```
shelby@shelby-VirtualBox:~/Lr2$ sudo ansible-playbook playbook.yml

PLAY [my_servers] *****

TASK [Gathering Facts] *****
ok: [local_server]

TASK [task1 : Create a text file with content] *****
changed: [local_server]

TASK [task1 : Read file content] *****
changed: [local_server]

TASK [task1 : Show file content] *****
ok: [local_server] => {
  "msg": "test_file_content"
}

TASK [task1 : Change the content of the file] *****
changed: [local_server]

TASK [task1 : Read file content] *****
changed: [local_server]

TASK [task1 : Show file content] *****
ok: [local_server] => {
  "msg": "new_file_content"
}

TASK [task1 : Remove the text file] *****
changed: [local_server]

TASK [task1 : Remove the text file] *****
changed: [local_server]

PLAY RECAP *****
local_server      : ok=8    changed=5    unreachable=0    failed=0    skipped=0    rescue
d=0    ignored=0

shelby@shelby-VirtualBox:~/Lr2$
```

Задание 2:

1) Добавим header и добавим index.html страничку в tasks:

```
:80 {  
  root * /usr/share/caddy  
  file_server  
  
  log {  
    output file /var/log/caddy/access.log  
    format json  
    level info  
  }  
  
  header / {  
    X-Custom-Header "Laboratornaya"  
  }  
}
```

```
- name: Create custom index.html  
copy:  
  content: |  
    <html>  
    <head>  
      <title>Laboratornaya</title>  
    </head>  
    <body>  
      <h1>Dont buy premium Tigers</h1>  
    </body>  
    </html>  
  dest: /usr/share/caddy/index.html
```

