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Факультет «Информатика и системы управления»

Кафедра ИУ5. Курс «Автоматизация разработки и эксплуатации ПО»

Отчет по домашнему заданию №2

Выполнил: Проверил:

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План и задачи лабораторной работы:

1. Поднять кластер и установить тестовую базу данных
2. Подготовить работу приложений
3. Установить балансировщик нагрузки nginx используя ad-hoc команды
4. Добавить еще один экземпляр 6_app_4

Ход выполнения работы:

1. <u>Поднять кластер и установить тестовую базу данных</u>

```
ansible@devopsiu5:~/Lab6$ docker-compose up -d --scale app=3
Creating network "lab6_default" with the default driver
WARNING: The "app" service specifies a port on the host. If multiple containers fo
r this service are created on a single host, the port will clash.
Creating lab6_app_1 ... done
Creating lab6_app_2 ... done
Creating lab6_app_3 ... done
Creating lab6_ansible_1 ... done
```

```
ansible@devopsiu5:~/Lab6$ docker ps
CONTAINER ID   IMAGE          COMMAND                CREATED          STATUS              PORTS
                NAMES
17bc237af5c8   lab6_ansible   "/bin/sh -c 'service…"  About a minute ago  Up About a minute   3306/tcp, 5000/tcp, 0.0.0.0:8080->8080/tcp, :::8080->8080/tcp
                lab6_ansible_1
fdfb7b976c33   lab6-agent     "/bin/sh -c 'service…"  2 minutes ago     Up 2 minutes        0.0.0.0:3301->3306/tcp, :::3301->3306/tcp, 0.0.0.0:8082->5000/tcp, :::80
82->5000/tcp   lab6_app_1
5d782ee1b3e0   lab6-agent     "/bin/sh -c 'service…"  2 minutes ago     Up About a minute   0.0.0.0:3302->3306/tcp, :::3302->3306/tcp, 0.0.0.0:8083->5000/tcp, :::80
83->5000/tcp   lab6_app_3
61c271c138f0   lab6-agent     "/bin/sh -c 'service…"  2 minutes ago     Up About a minute   0.0.0.0:3303->3306/tcp, :::3303->3306/tcp, 0.0.0.0:8084->5000/tcp, :::80
84->5000/tcp   lab6_app_2
```

```
lab6_app_3 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
lab6_app_1 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
lab6_app_2 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
lab6_ansible_1 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
```

```
lab6_app_1 | CHANGED | rc=0 >>
 13:33:09 up  1:29,  1 user,  load average: 0.50, 0.22, 0.28
lab6_app_2 | CHANGED | rc=0 >>
 13:33:09 up  1:29,  1 user,  load average: 0.50, 0.22, 0.28
lab6_app_3 | CHANGED | rc=0 >>
 13:33:09 up  1:29,  1 user,  load average: 0.50, 0.22, 0.28
lab6_ansible_1 | CHANGED | rc=0 >>
 13:33:09 up  1:29,  1 user,  load average: 0.50, 0.22, 0.28
```

```
mysql> select * from test;
+-------------------+
| message           |
+-------------------+
| Ansible To Do List |
| Get ready         |
| Ansible is fun    |
+-------------------+
3 rows in set (0.05 sec)
```

2. Подготовить работу приложений

```
root@17bc237af5c8:/# ansible application -a "curl localhost:5000" -m shell
[WARNING]: Consider using the get_url or uri module rather than running 'curl'.
If you need to use command because get_url or uri is insufficient you can add
'warn: false' to this command task or set 'command_warnings=False' in ansible.cfg
to get rid of this message.
lab6_app_2 | CHANGED | rc=0 >>
{"61c271c138f0": [{"message": "Ansible To Do List"}, {"message": "Get ready"}, {"m
essage": "Ansible is fun"}]}  % Total    % Received % Xferd  Average Speed   Time
   Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   110  100   110    0     0    516      0 --:--:-- --:--:-- --:--:--   518
lab6_app_1 | CHANGED | rc=0 >>
{"fdfb7b976c33": [{"message": "Ansible To Do List"}, {"message": "Get ready"}, {"m
essage": "Ansible is fun"}]}  % Total    % Received % Xferd  Average Speed   Time
   Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   110  100   110    0     0    460      0 --:--:-- --:--:-- --:--:--   462
```

3. Установить балансировщик нагрузки nginx используя ad-hoc команды

localhost:8080

{"61c271c138f0": [{"message": "Ansible To Do List"}, {"message": "Get ready"}, {"message": "Ansible is fun"}]}

4. Добавить еще один экземпляр 6_app_4

```
lab6_app_2 | CHANGED | rc=0 >>
{"549fd99ed479": [{"message": "Ansible To Do List"}, {"message": "Get ready"}, {"m
essage": "Ansible is fun"}]}  % Total    % Received % Xferd  Average Speed   Time
   Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   110  100   110    0     0     35      0  0:00:03  0:00:03 --:--:--    35
lab6_app_4 | CHANGED | rc=0 >>
{"e0852d803a27": [{"message": "Ansible To Do List"}, {"message": "Get ready"}, {"m
essage": "Ansible is fun"}]}  % Total    % Received % Xferd  Average Speed   Time
   Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   110  100   110    0     0     35      0  0:00:03  0:00:03 --:--:--    35
lab6_app_1 | CHANGED | rc=0 >>
{"da1361ldaab8": [{"message": "Ansible To Do List"}, {"message": "Get ready"}, {"m
essage": "Ansible is fun"}]}  % Total    % Received % Xferd  Average Speed   Time
   Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   110  100   110    0     0     35      0  0:00:03  0:00:03 --:--:--    35
```