

# Terraform

Задание.

1.С помощью заранее подготовленных образов reddit-app и reddit-db развернуть две VM на яндекс клауд через тераформ.

reddit-app - образ содержащий в себе ОС ubuntu-1604 с установленными ruby и bundler

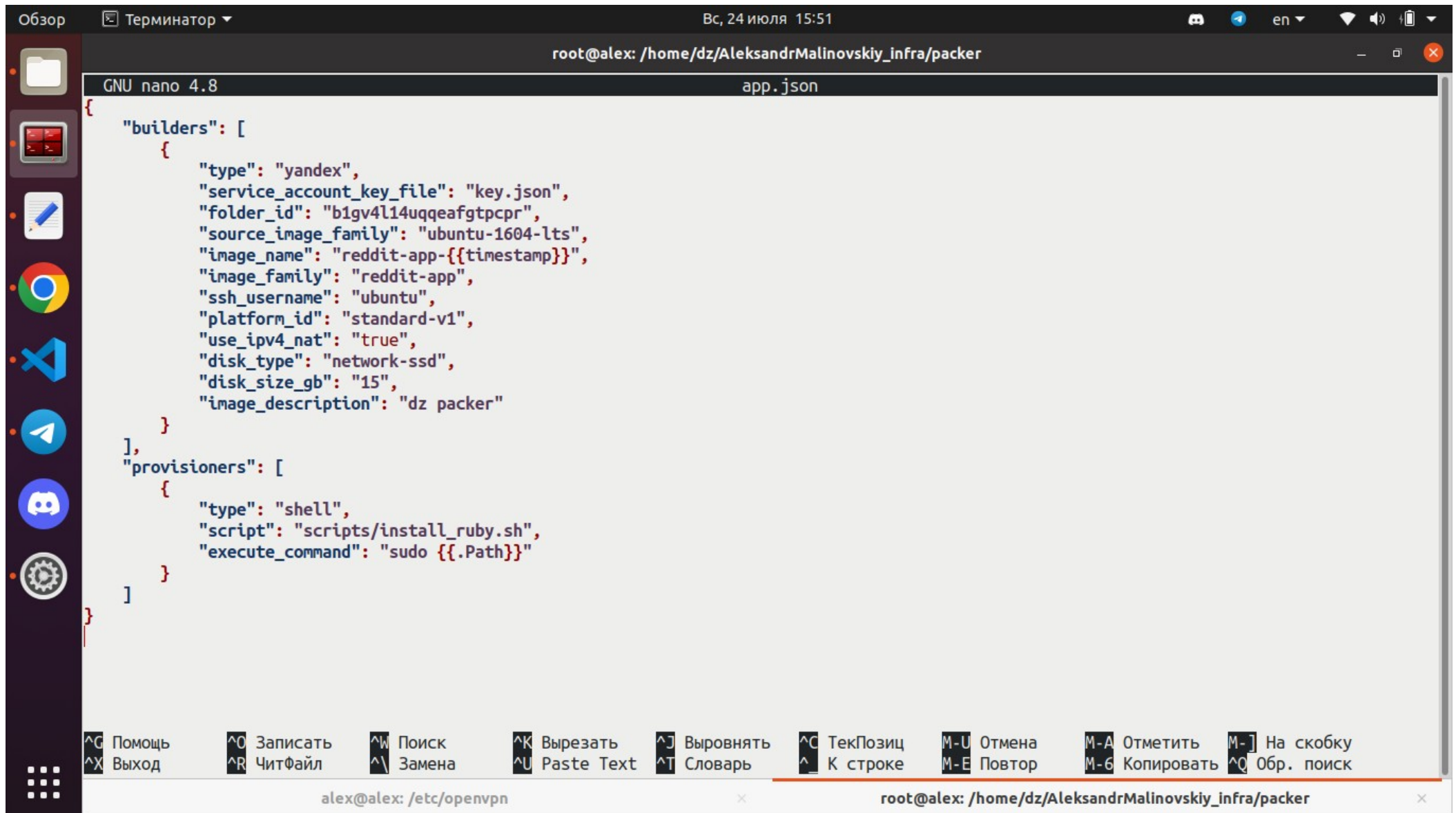
reddit-db - образ содержащий в себе ОС ubuntu-1604 с установленной mongoDB

2.Прописать reddit-app и reddit-db в модули.

3.Создать окружение stage и prod

4.Настроить хранение стейт файла в удаленном бекенде в удаленном бекенде (remote backends) для окружений stage и prod, используя Yandex Object Storage в качестве бекенда.. Описание бекенда нужно вынести в отдельный файл backend.tf

# Packer образ app.json

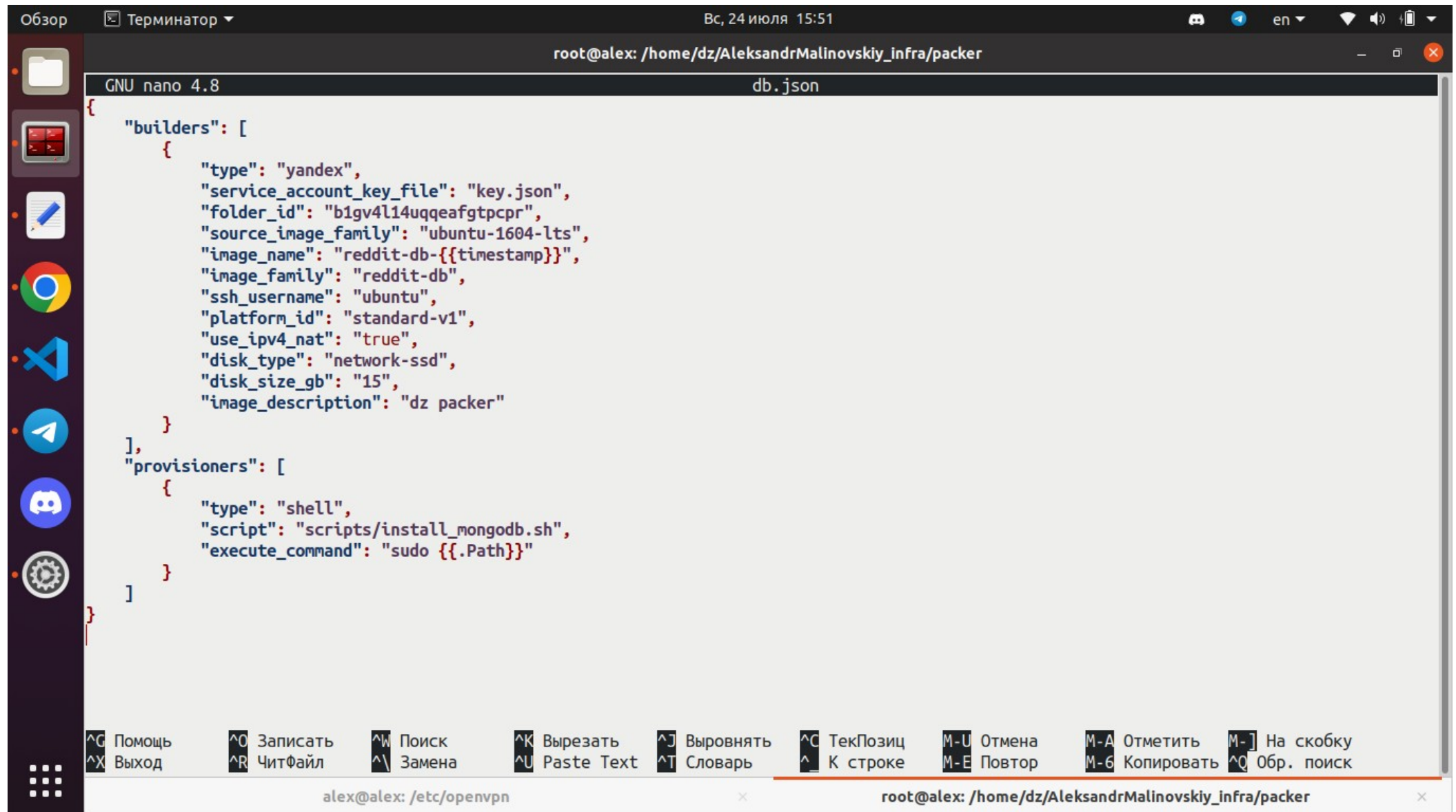


```
root@alex: /home/dz/AleksandrMalinovskiy_infra/packer
GNU nano 4.8 app.json
{
  "builders": [
    {
      "type": "yandex",
      "service_account_key_file": "key.json",
      "folder_id": "b1gv4l14uqqeafgtpcpr",
      "source_image_family": "ubuntu-1604-lts",
      "image_name": "reddit-app-{{timestamp}}",
      "image_family": "reddit-app",
      "ssh_username": "ubuntu",
      "platform_id": "standard-v1",
      "use_ipv4_nat": "true",
      "disk_type": "network-ssd",
      "disk_size_gb": "15",
      "image_description": "dz packer"
    }
  ],
  "provisioners": [
    {
      "type": "shell",
      "script": "scripts/install_ruby.sh",
      "execute_command": "sudo {{.Path}}"
    }
  ]
}
```

^G Помощь ^O Записать ^W Поиск ^K Вырезать ^J Выровнять ^C ТекПозиц M-U Отмена M-A Отметить M-] На скобку  
^X Выход ^R ЧитФайл ^\ Замена ^U Paste Text ^T Словарь ^\_ К строке M-E Повтор M-6 Копировать ^Q Обр. поиск

alex@alex: /etc/openvpn x root@alex: /home/dz/AleksandrMalinovskiy\_infra/packer x

# Packer образ db.json



The screenshot shows a terminal window with the title bar "Обзор Терминатор" and the date/time "Вс, 24 июля 15:51". The terminal prompt is "root@alex: /home/dz/AleksandrMalinovskiy\_infra/packer". The file being edited is "db.json" using "GNU nano 4.8". The configuration is as follows:

```
{
  "builders": [
    {
      "type": "yandex",
      "service_account_key_file": "key.json",
      "folder_id": "b1gv4l14uqqeafgtpcpr",
      "source_image_family": "ubuntu-1604-lts",
      "image_name": "reddit-db-{{timestamp}}",
      "image_family": "reddit-db",
      "ssh_username": "ubuntu",
      "platform_id": "standard-v1",
      "use_ipv4_nat": "true",
      "disk_type": "network-ssd",
      "disk_size_gb": "15",
      "image_description": "dz packer"
    }
  ],
  "provisioners": [
    {
      "type": "shell",
      "script": "scripts/install_mongodb.sh",
      "execute_command": "sudo {{.Path}}"
    }
  ]
}
```

At the bottom of the terminal, there is a status bar with keyboard shortcuts for nano editor:

^G Помощь	^O Записать	^W Поиск	^K Вырезать	^J Выводить	^C ТекПозиц	M-U Отмена	M-A Отметить	M-] На скобку
^X Выход	^R ЧитФайл	^_ Замена	^U Paste Text	^T Словарь	^_ К строке	M-E Повтор	M-6 Копировать	^Q Обр. поиск

The terminal also shows the prompt "alex@alex: /etc/openvpn" and the file path "root@alex: /home/dz/AleksandrMalinovskiy\_infra/packer".

# Packer образы на yandex cloud

Обзор Google Chrome Вс, 24 июля 15:54

console.cloud.yandex.ru/folders/b1gv4l14uqqeafgtcpr/compute/images

cloud-mallinovs... infa Compute Cloud / Образы

Загрузить образ

### Образы

Фильтр по имени Все статусы

<input type="checkbox"/>	Имя	Описание	Размер	Статус	Дата создания	Оптимизировать для развертывания	Идентификатор	⚙
<input type="checkbox"/>	reddit-base-1657778075	Created by Packer	10 ГБ	Ready	14 июля 2022, в 08:57	нет	fd8e0jfb0fg8tckh7t0s	...
<input checked="" type="checkbox"/>	reddit-db-1658467899	dz packer	15 ГБ	Ready	22 июля 2022, в 08:34	нет	fd8n6rnikn6t5ea43bu9	...
<input checked="" type="checkbox"/>	reddit-app-1658467260	dz packer	15 ГБ	Ready	22 июля 2022, в 08:22	нет	fd8u6ickqvmslitpa3kh	...

Выбрано 2 образа

Удалить

Создана директория modules в ней созданы директории app и db.  
Содержание директории app. (main.tf outputs.tf variables.tf)



The screenshot shows a terminal window with the title bar "Обзор Терминатор" and the current directory "root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/app". The terminal is running GNU nano 4.8 and editing the file main.tf. The content of main.tf is as follows:

```
resource "yandex_compute_instance" "app" {
  name = "reddit-app"

  labels = {
    tags = "reddit-app"
  }

  resources {
    cores = 2
    memory = 2
  }

  boot_disk {
    initialize_params {
      image_id = var.app_disk_image
    }
  }

  network_interface {
    subnet_id = var.subnet_id
    nat = true
  }

  metadata = {
    ssh-keys = "ubuntu:${file(var.public_key_path)}"
  }
}
```

At the bottom of the terminal, there is a menu bar with various shortcuts and actions:

- ^G Помощь
- ^X Выход
- ^O Записать
- ^R ЧитФайл
- ^W Поиск
- ^\_ Замена
- ^K Вырезать
- ^U Paste Text
- ^J Выводить
- ^T Словарь
- ^C ТекПозиц
- ^\_ К строке
- M-U Отмена
- M-E Повтор
- M-A Отметить
- M-6 Копировать
- M-J На скобку
- ^Q Обр. поиск

The terminal also shows two open tabs at the bottom: "alex@alex: /etc/openvpn" and "root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/app".



root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/app



GNU nano 4.8

variables.tf

```
variable public_key_path {  
  # Описание переменной  
  description = "Path to the public key used for ssh access"  
}  
variable subnet_id {  
  description = "Subnet"  
}  
variable app_disk_image {  
  description = "Disk image for reddit app"  
  default = "reddit-app-base"  
}
```

[ Прочитано 11 строк ]

^G Помощь

^O Записать

^W Поиск

^K Вырезать

^J Выровнять

^C ТекПозиц

M-U Отмена

M-A Отметить

M-] На скобку

^X Выход

^R ЧитФайл

^\_ Замена

^U Paste Text

^T Словарь

^\_ К строке

M-E Повтор

M-6 Копировать

^Q Обр. поиск

alex@alex: /etc/openvpn

root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/app

root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/app



GNU nano 4.8

outputs.tf

```
output "external_ip_address_app" {  
  value = yandex_compute_instance.app.network_interface.0.nat_ip_address  
}
```

[ Прочитано 3 строки ]

^G Помощь

^O Записать

^W Поиск

^K Вырезать

^J Выводить

^C ТекПозиц

M-U Отмена

M-A Отметить

M-] На скобку

^X Выход

^R ЧитФайл

^\_ Замена

^U Paste Text

^T Словарь

^\_ К строке

M-E Повтор

M-6 Копировать

^Q Обр. поиск

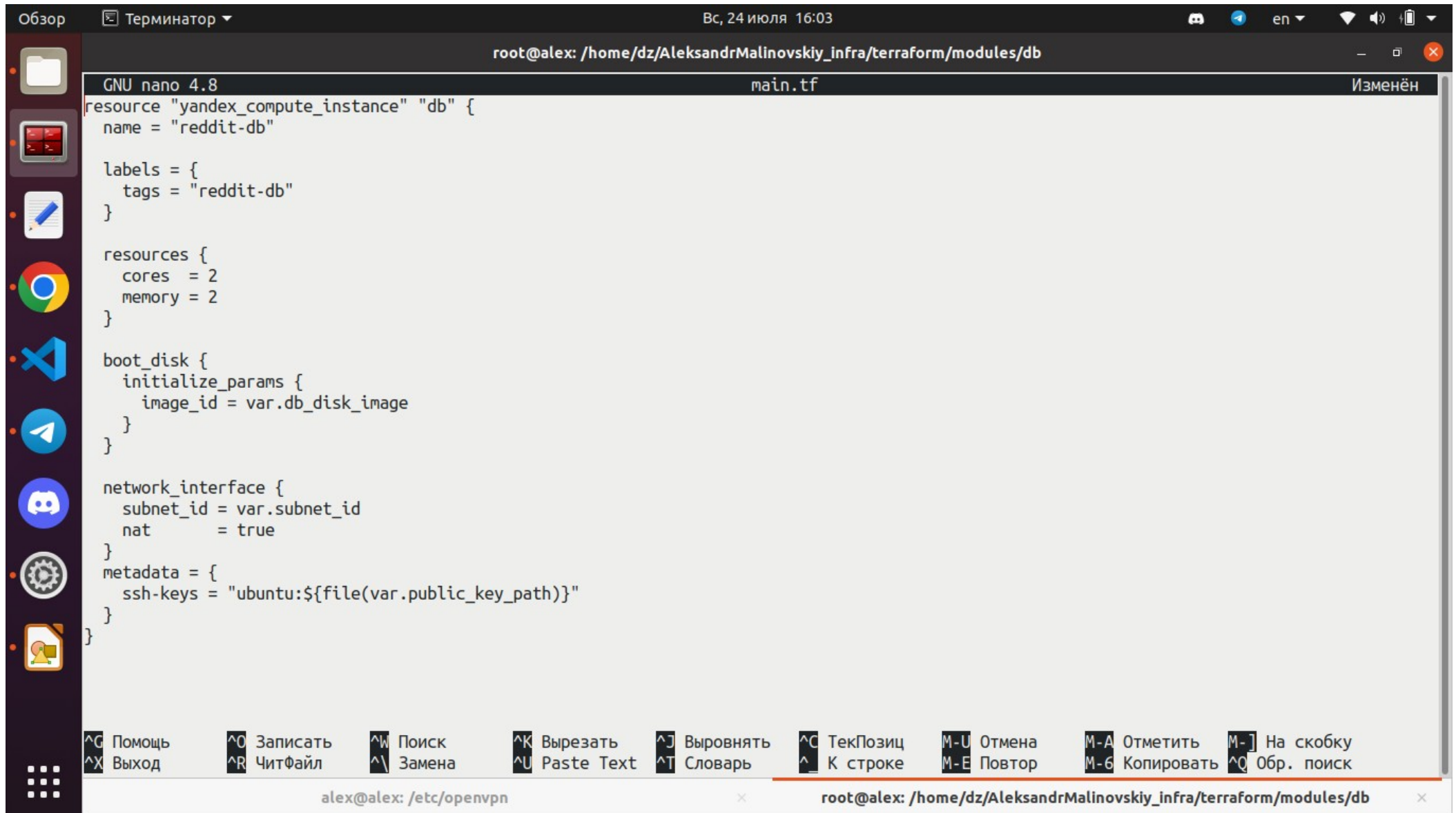
alex@alex: /etc/openvpn



root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/app



# Содержание директории db. (main.tf outputs.tf variables.tf)



The screenshot shows a terminal window with a dark theme. The top bar indicates the user is root@alex and the current directory is /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/db. The terminal is running GNU nano 4.8, editing the file main.tf. The file content is a Terraform configuration for a yandex\_compute\_instance resource named 'db' with various settings like labels, resources, boot\_disk, network\_interface, and metadata. The bottom of the terminal shows a list of keyboard shortcuts for nano, such as ^G for help and ^X for exit. The terminal also shows the user's shell prompt as alex@alex: /etc/opensvn.

```
root@alex: /home/dz/AleksandrMalinovskiy_infra/terraform/modules/db
GNU nano 4.8 main.tf
resource "yandex_compute_instance" "db" {
  name = "reddit-db"

  labels = {
    tags = "reddit-db"
  }

  resources {
    cores = 2
    memory = 2
  }

  boot_disk {
    initialize_params {
      image_id = var.db_disk_image
    }
  }

  network_interface {
    subnet_id = var.subnet_id
    nat       = true
  }

  metadata = {
    ssh-keys = "ubuntu:${file(var.public_key_path)}"
  }
}
```

alex@alex: /etc/opensvn



root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/db

— □ ×

GNU nano 4.8

variables.tf

Изменён

```
variable public_key_path {  
  description = "Path to the public key used for ssh access"  
}  
variable subnet_id {  
  description = "Subnet"  
}  
variable db_disk_image {  
  description = "Disk image for reddit db"  
  default = "reddit-db-base"  
}
```

^G Помощь

^O Записать

^W Поиск

^K Вырезать

^J Выровнять

^C ТекПозиц

M-U Отмена

M-A Отметить

M-] На скобку

^X Выход

^R ЧитФайл

^\_ Замена

^U Paste Text

^T Словарь

^\_ К строке

M-E Повтор

M-6 Копировать

^Q Обр. поиск

alex@alex: /etc/openvpn

×

root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/db

×

root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/db



GNU nano 4.8

outputs.tf

```
output "external_ip_address_db" {  
  value = yandex_compute_instance.db.network_interface.0.nat_ip_address  
}
```

[ Прочитано 3 строки ]

^G Помощь  
^X Выход

^O Записать  
^R ЧитФайл

^W Поиск  
^\_ Замена

^K Вырезать  
^U Paste Text

^J Выводить  
^T Словарь

^C ТекПозиц  
^\_ К строке

M-U Отмена  
M-E Повтор

M-A Отметить  
M-6 Копировать

M-] На скобку  
^Q Обр. поиск

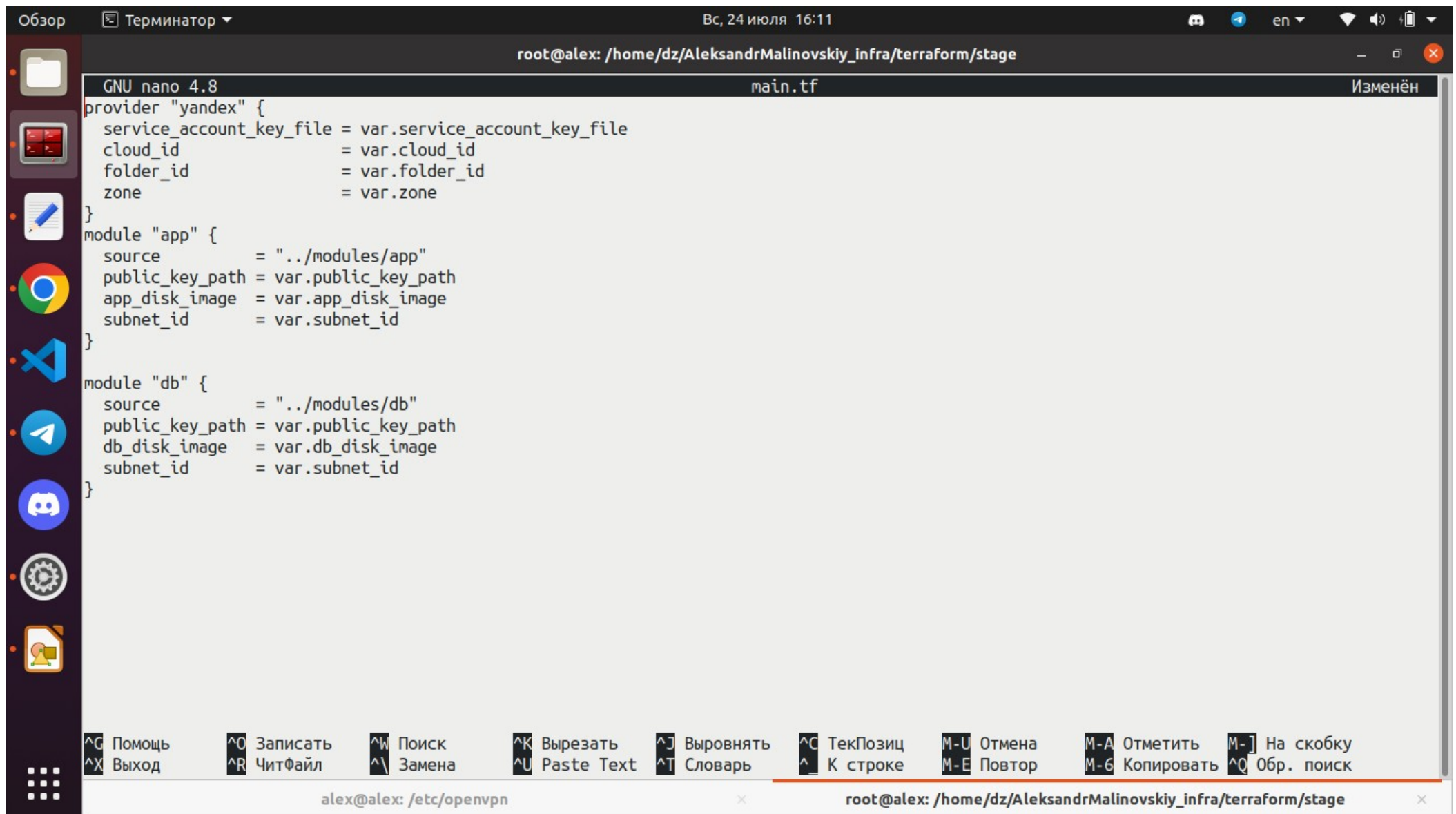
alex@alex: /etc/openvpn



root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/modules/db



Созданы директории stage и prod.  
Содержание директорий stage и prod.  
(key.json, main.tf, outputs.tf, terraform.tfvars, variables.tf)



Обзор Терминатор Вск, 24 июля 16:11

root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/stage

GNU nano 4.8 main.tf Изменён

```
provider "yandex" {
  service_account_key_file = var.service_account_key_file
  cloud_id                  = var.cloud_id
  folder_id                 = var.folder_id
  zone                     = var.zone
}

module "app" {
  source          = "../modules/app"
  public_key_path = var.public_key_path
  app_disk_image  = var.app_disk_image
  subnet_id       = var.subnet_id
}

module "db" {
  source          = "../modules/db"
  public_key_path = var.public_key_path
  db_disk_image   = var.db_disk_image
  subnet_id       = var.subnet_id
}
```

^G Помощь ^O Записать ^W Поиск ^K Вырезать ^J Выровнять ^C ТекПозиц M-U Отмена M-A Отметить M-] На скобку  
^X Выход ^R ЧитФайл ^\ Замена ^U Paste Text ^T Словарь ^\_ К строке M-E Повтор M-6 Копировать ^Q Обр. поиск

alex@alex: /etc/opensvpn x root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/stage x

root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/stage



GNU nano 4.8

outputs.tf

Изменён

```
output "external_ip_address_app" {  
  value = module.app.external_ip_address_app  
}  
output "external_ip_address_db" {  
  value = module.db.external_ip_address_db  
}
```

^G Помощь

^O Записать

^W Поиск

^K Вырезать

^J Выровнять

^C ТекПозиц

M-U Отмена

M-A Отметить

M-] На скобку

^X Выход

^R ЧитФайл

^\_ Замена

^U Paste Text

^T Словарь

^\_ К строке

M-E Повтор

M-6 Копировать

^Q Обр. поиск

alex@alex: /etc/openvpn



root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/stage





GNU nano 4.8

variables.tf

```
variable cloud_id {  
  description = "Cloud"  
}  
variable folder_id {  
  description = "Folder"  
}  
variable zone {  
  description = "Zone"  
  # Значение по умолчанию  
  default = "ru-central1-a"  
}  
variable public_key_path {  
  # Описание переменной  
  description = "Path to the public key used for ssh access"  
}  
variable image_id {  
  description = "Disk image"  
}  
variable subnet_id {  
  description = "Subnet"  
}  
variable service_account_key_file {  
  description = "key .json"  
}  
variable private_key {  
  description = "Path to the private key"  
}  
variable app_disk_image {  
  description = "Disk image for reddit app"  
  default     = "reddit-app-base"  
}  
variable db_disk_image {  
  description = "Disk image for reddit db"  
  default     = "reddit-db-base"  
}
```

^G Помощь  
^X Выход

^O Записать  
^R ЧитФайл

^W Поиск  
^\_ Замена

^K Вырезать  
^U Paste Text

^J Выводить  
^T Словарь

^C ТекПозиц  
^\_ К строке

M-U Отмена  
M-E Повтор

M-A Отметить  
M-6 Копировать

M-] На скобку  
^Q Обр. поиск



root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/stage

— □ ×

GNU nano 4.8

terraform.tfvars

Изменён

```
cloud_id      = "b1g74d5n11q830j12nho"
folder_id    = "b1gv4l1wq1qqeafgtpcpr"
zone         = "ru-central1-a"
image_id     = "fd8e0jfb0fg8tckh7t0s"
public_key_path = "/root/.ssh/id_rsa.pub"
subnet_id    = "e9b63rlo14e2ikp2kkqq9"
service_account_key_file = "key.json"
private_key  = "~/ssh/id_rsa"
app_disk_image = "fd8u6ickqrtyslitpa3kh"
db_disk_image = "fd8n6rniknipl5ea43bu9"
```

^G Помощь

^O Записать

^W Поиск

^K Вырезать

^J Выровнять

^C ТекПозиц

M-U Отмена

M-A Отметить

M-] На скобку

^X Выход

^R ЧитФайл

^\_ Замена

^U Paste Text

^T Словарь

^\_ К строке

M-E Повтор

M-6 Копировать

^Q Обр. поиск

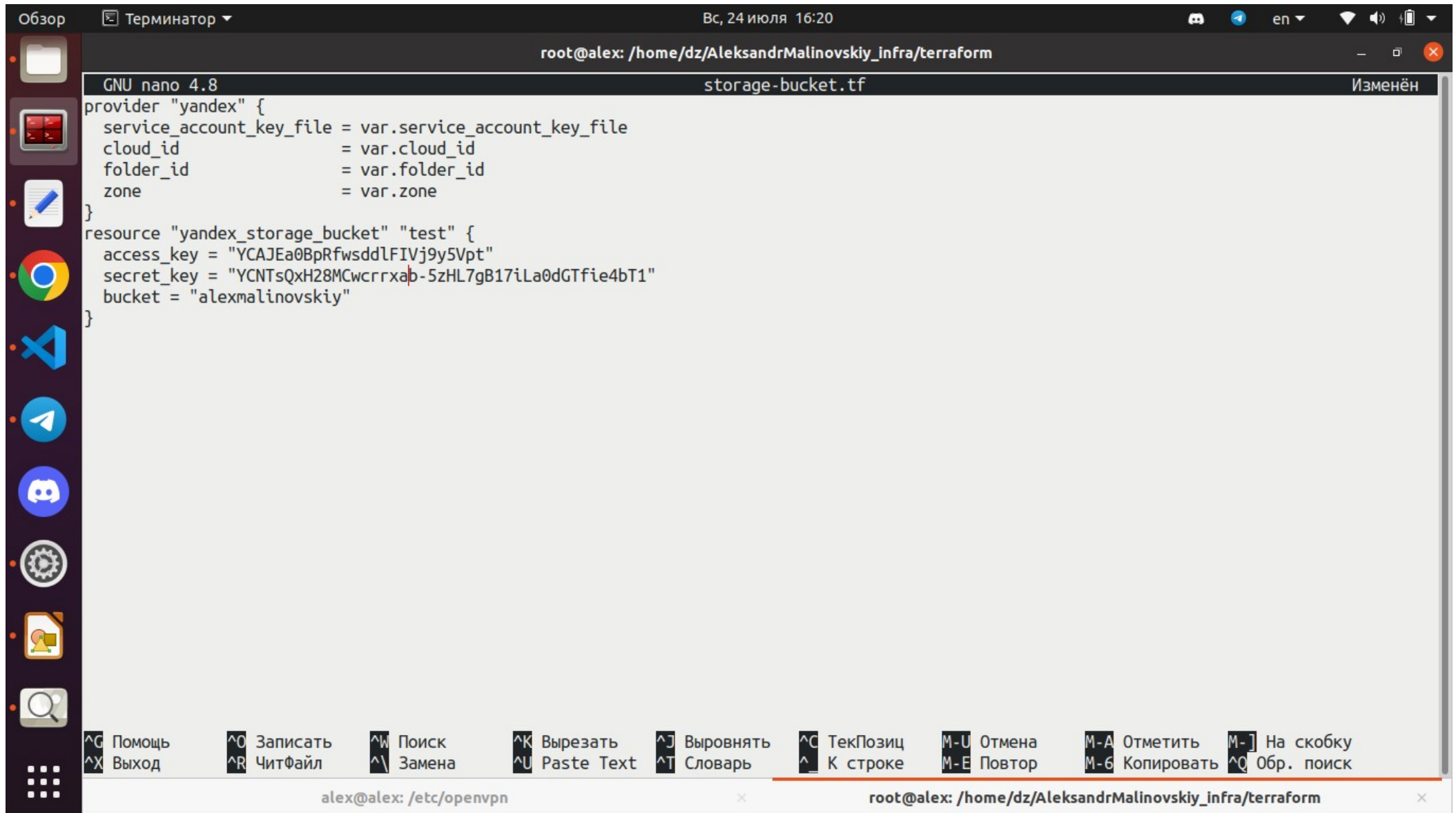
alex@alex: /etc/opensvpn

×

root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/stage

×

# Создаем файл storage-bucket.tf где описываем создание бакета на yandex cloud.

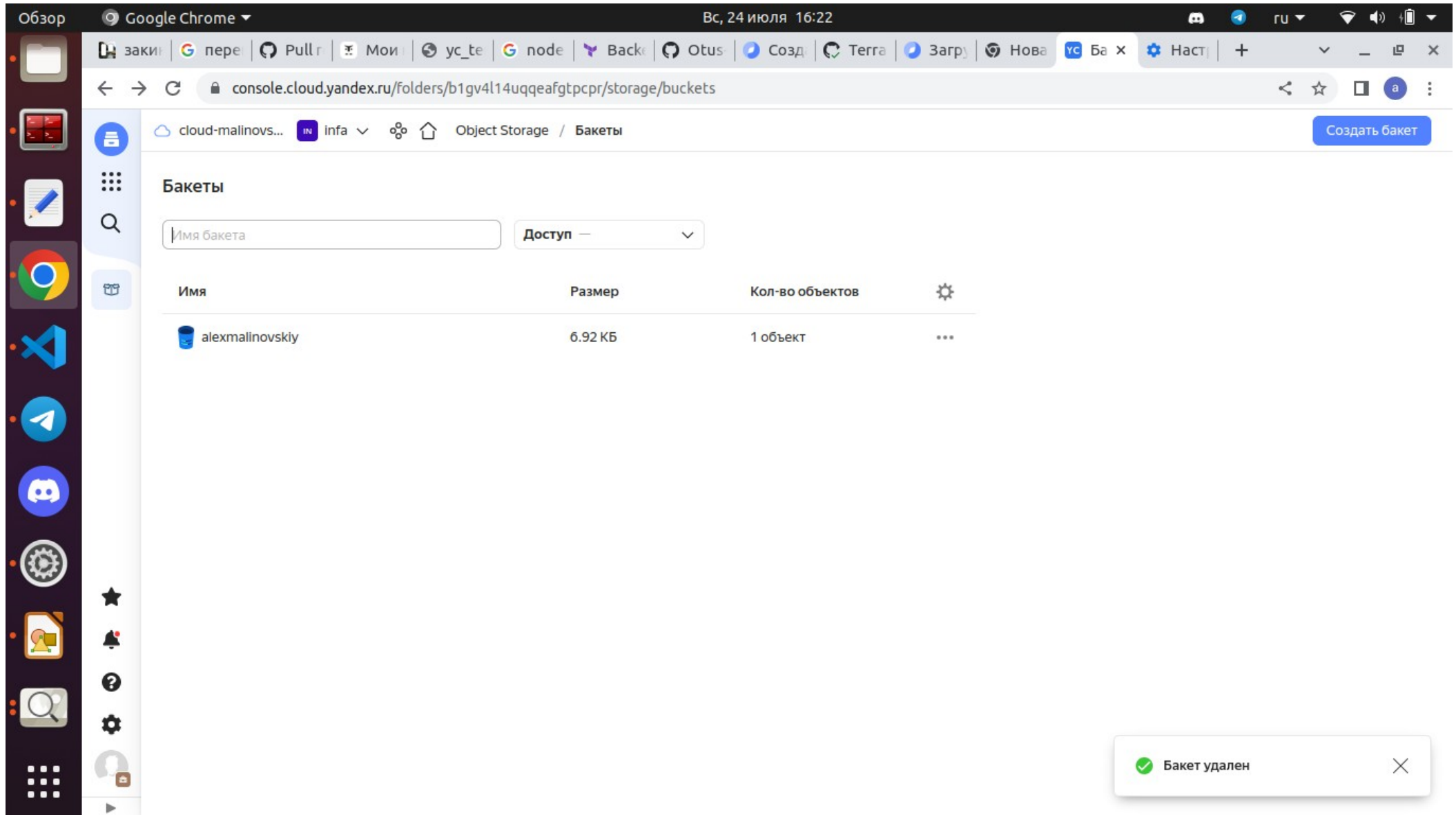


The screenshot shows a terminal window with a dark theme. The title bar at the top indicates the current directory is `root@alex: /home/dz/AleksandrMalinovskiy_infra/terraform` and the time is 16:20 on Sunday, July 24. The terminal is running the GNU nano 4.8 text editor, editing a file named `storage-bucket.tf`. The file contains Terraform configuration for a Yandex storage bucket. The configuration includes a provider block for 'yandex' with variables for service account key file, cloud ID, folder ID, and zone. It also includes a resource block for 'yandex\_storage\_bucket' named 'test', with specific access and secret keys, and a bucket name 'alexmalinovskiy'. The bottom of the terminal shows a command palette with various shortcuts in Russian, such as 'Помощь' (Help), 'Записать' (Save), 'Поиск' (Search), and 'Выход' (Exit). The status bar at the very bottom shows the current directory and the file being edited.

```
root@alex: /home/dz/AleksandrMalinovskiy_infra/terraform
GNU nano 4.8 storage-bucket.tf
provider "yandex" {
  service_account_key_file = var.service_account_key_file
  cloud_id                  = var.cloud_id
  folder_id                 = var.folder_id
  zone                     = var.zone
}
resource "yandex_storage_bucket" "test" {
  access_key = "YCAJEa0BpRfwsddlFIVj9y5Vpt"
  secret_key = "YCNTsQxH28MCwcrxap-5zHL7gB17iLa0dGTfie4bT1"
  bucket     = "alexmalinovskiy"
}
```

alex@alex: /etc/openssl root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform

# В yandex cloud появился созданный бакет.

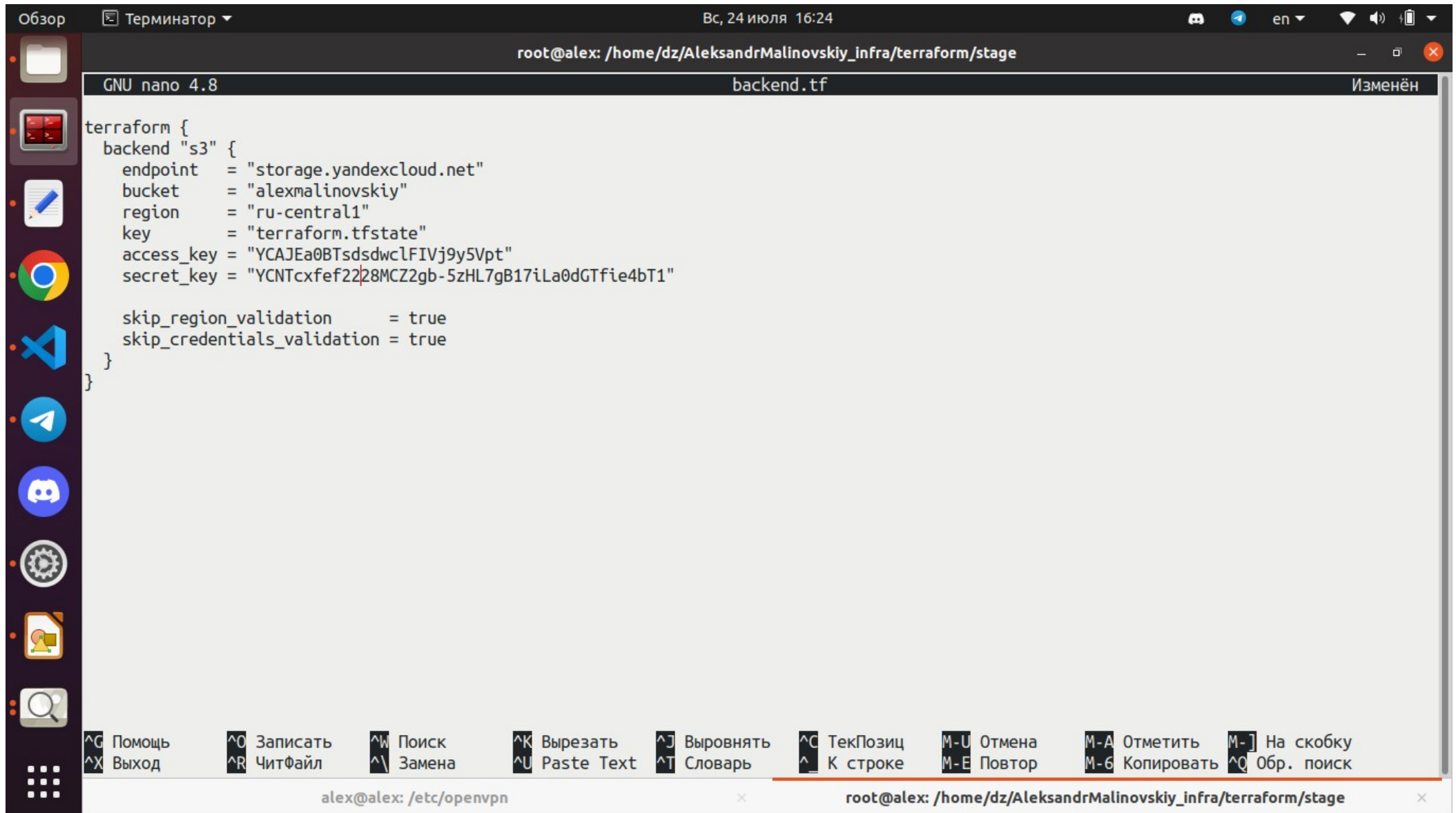


The screenshot shows the Yandex Cloud console interface. The browser address bar displays `console.cloud.yandex.ru/folders/b1gv4l14uqqeafgtpcpr/storage/buckets`. The page title is "Обзор" (Overview). The main content area is titled "Бакеты" (Buckets) and includes a search bar and a "Создать бакет" (Create bucket) button. A table lists the buckets:

Имя	Размер	Кол-во объектов	
alexmalinovski	6.92 КБ	1 объект	...

A notification at the bottom right indicates: "Бакет удален" (Bucket deleted).

Создаем в директориях stage и prod файл backend.tf где описываем хранение стейт файла в удаленном бекенде.



```
root@alex: /home/dz/AleksandrMalinovskiy_infra/terraform/stage
GNU nano 4.8 backend.tf
terraform {
  backend "s3" {
    endpoint = "storage.yandexcloud.net"
    bucket   = "alexmalinovskiy"
    region   = "ru-central1"
    key       = "terraform.tfstate"
    access_key = "YCAJEa0BTsdsdwclFIVj9y5Vpt"
    secret_key = "YCNTcxfef2228MCZ2gb-5zHL7gB17iLa0dGTfie4bT1"

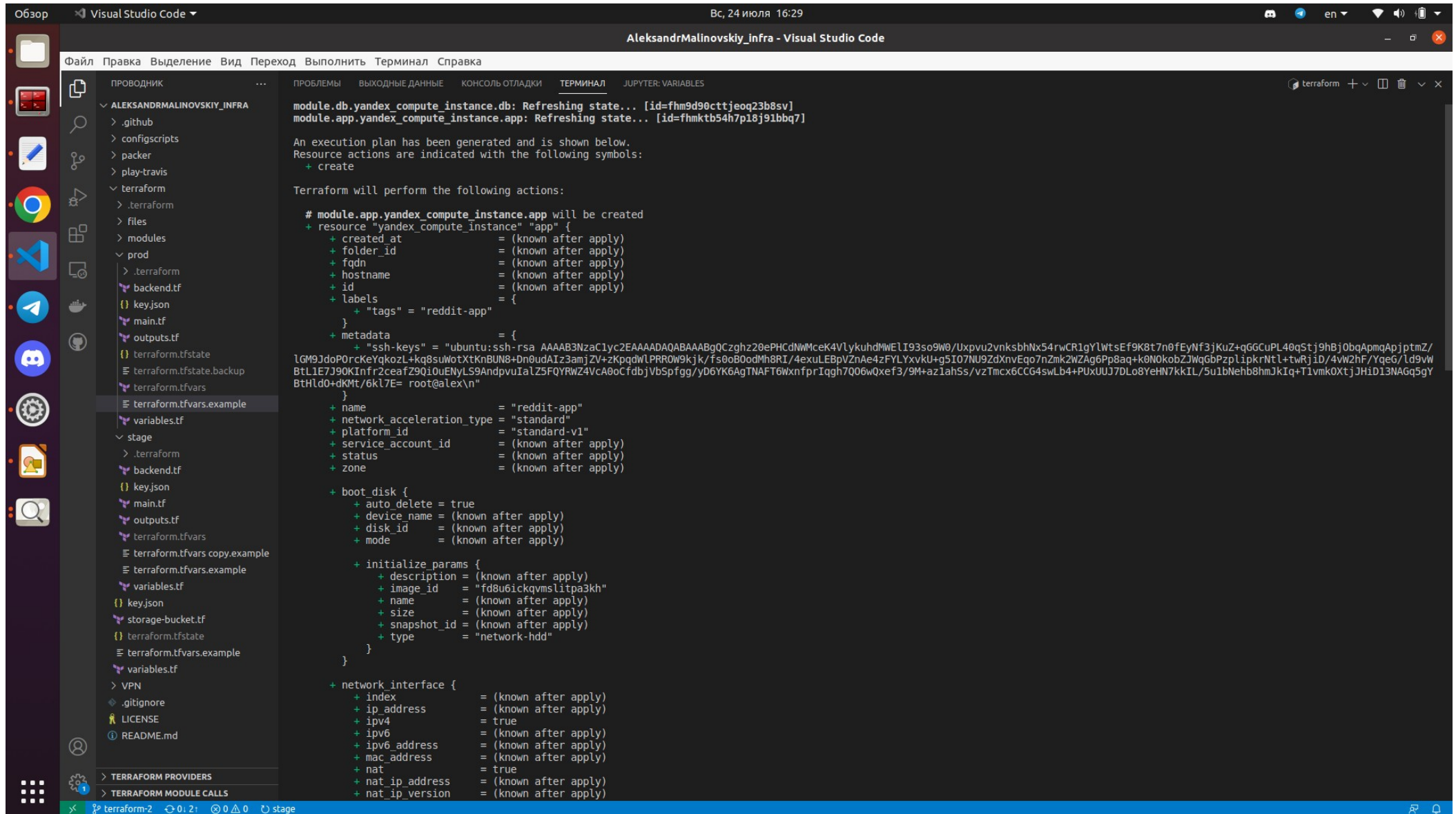
    skip_region_validation      = true
    skip_credentials_validation = true
  }
}
```

alex@alex: /etc/opensvpn x root@alex: /home/dz/AleksandrMalinovskiy\_infra/terraform/stage x

^G Помощь ^O Записать ^W Поиск ^K Вырезать ^J Выровнять ^C ТекПозиц M-U Отмена M-A Отметить M-] На скобку  
^X Выход ^R ЧитФайл ^\ Замена ^U Paste Text ^T Словарь ^\_ К строке M-E Повтор M-6 Копировать ^Q Обр. поиск



# Создаем инстанс из папки prod.



The screenshot shows the Visual Studio Code interface with a Terraform configuration file open. The left sidebar displays the file explorer with a project structure including folders like .github, configs, packer, play-travis, terraform, and prod. The main editor area shows the Terraform configuration for a Yandex Compute Instance, and the right sidebar displays the execution plan output.

```
module.db.yandex_compute_instance.db: Refreshing state... [id=fhm9d90cttjeoq23b8sv]
module.app.yandex_compute_instance.app: Refreshing state... [id=fhmktb54h7p18j91bbq7]

An execution plan has been generated and is shown below.
Resource actions are indicated with the following symbols:
+ create

Terraform will perform the following actions:

# module.app.yandex_compute_instance.app will be created
+ resource "yandex_compute_instance" "app" {
  + created_at      = (known after apply)
  + folder_id      = (known after apply)
  + fqdn            = (known after apply)
  + hostname        = (known after apply)
  + id              = (known after apply)
  + labels          = {
    + "tags" = "reddit-app"
  }
  + metadata        = {
    + "ssh-keys" = "ubuntu:ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQOCgzhz20ePHCdNWMceK4VlykuhdMwELI93so9W0/Uxpvu2vnksbhnX54rwCR1gYlWtsEf9K8t7n0fEyWf3jKuZ+qGGCuPL40qStj9hBj0bqApmqApjptmZ/
    LGM9JdoP0rcKeyqkoZL+kq8suWotXtknBUN8+Dn0udAIz3amjZV+zKpqdWLP0R0W9Kjk/fs0oB0odMh8RI/4exuLEBpVZnAe4zFYLxvku+g5I07NU9ZdXnvEqo7nZmk2wZAg6Pp8aq+k0N0kobZJWqGbPzp1ipkrNtl+twRj1D/4vW2hF/YqeG/Ld9vW
    BtL1E7J90KInfr2ceafZ9Q10uENyLS9AndpvaIalZ5FQYRWZ4VcA0oCfdbjVbSpfg/yd6YK6AGTNAFT6WxnfrIqgh7Q06wQxef3/9M+az1ah5s/vzTmcx6CCG4swLb4+PUXUUJ7DL08YeHN7kkIL/5u1bNehb8hmJkIq+T1vmk0XtjJHid13NAGq5gY
    BtHld0+dKMT/6kl7E= root@alex\n"
  }
  + name            = "reddit-app"
  + network_acceleration_type = "standard"
  + platform_id     = "standard-v1"
  + service_account_id = (known after apply)
  + status          = (known after apply)
  + zone            = (known after apply)

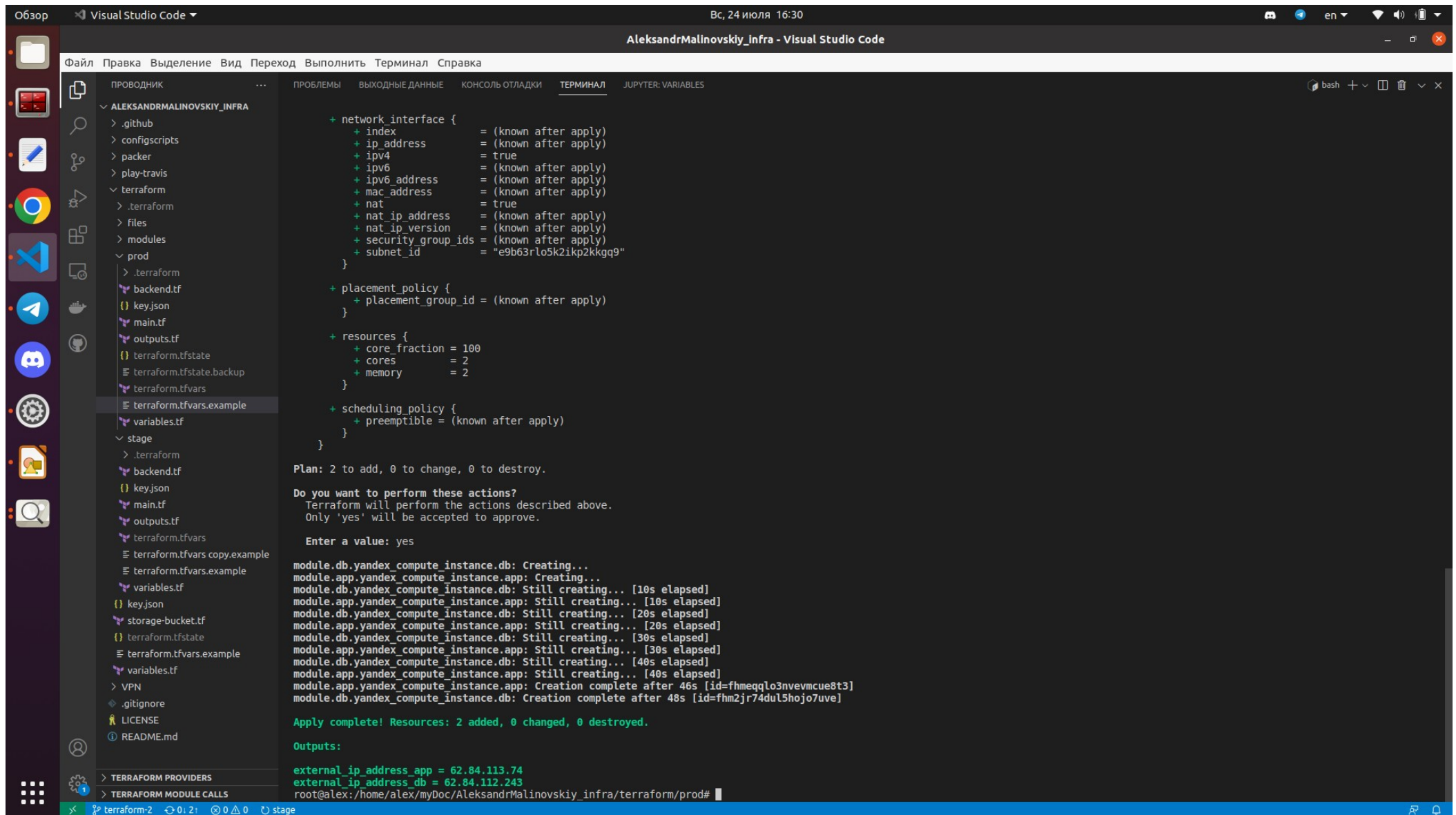
  + boot_disk {
    + auto_delete = true
    + device_name = (known after apply)
    + disk_id     = (known after apply)
    + mode        = (known after apply)

    + initialize_params {
      + description = (known after apply)
      + image_id    = "fd8u6ickqvmslitpa3kh"
      + name        = (known after apply)
      + size        = (known after apply)
      + snapshot_id = (known after apply)
      + type        = "network-hdd"
    }
  }

  + network_interface {
    + index      = (known after apply)
    + ip_address = (known after apply)
    + ipv4       = true
    + ipv6       = (known after apply)
    + ipv6_address = (known after apply)
    + mac_address = (known after apply)
    + nat        = true
    + nat_ip_address = (known after apply)
    + nat_ip_version = (known after apply)
  }
}
```



# Получаем на выходе две ВМ reddit-app и reddit-db



The screenshot shows the Visual Studio Code interface with a Terraform configuration file open in the editor and its execution output in the terminal.

**File Explorer (Left):** Shows the project structure for `AleksandrMalinovskyi_INFRA`. The `prod` directory is expanded, showing `.terraform`, `backend.tf`, `key.json`, `main.tf`, `outputs.tf`, `terraform.tfstate`, `terraform.tfstate.backup`, `terraform.tfvars`, `terraform.tfvars.example`, `variables.tf`, `stage`, `storage-bucket.tf`, `terraform.tfstate`, `terraform.tfvars.example`, `variables.tf`, `VPN`, `.gitignore`, `LICENSE`, and `README.md`.

**Editor (Center):** Displays the `main.tf` file with the following Terraform configuration:

```
+ network_interface {
  + index                = (known after apply)
  + ip_address           = (known after apply)
  + ipv4                 = true
  + ipv6                 = (known after apply)
  + ipv6_address         = (known after apply)
  + mac_address          = (known after apply)
  + nat                  = true
  + nat_ip_address       = (known after apply)
  + nat_ip_version       = (known after apply)
  + security_group_ids   = (known after apply)
  + subnet_id            = "e9b63rlo5k2ikp2kkgq9"
}

+ placement_policy {
  + placement_group_id = (known after apply)
}

+ resources {
  + core_fraction = 100
  + cores         = 2
  + memory        = 2
}

+ scheduling_policy {
  + preemptible = (known after apply)
}
```

**Terminal (Bottom):** Shows the Terraform execution output:

```
Plan: 2 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
Terraform will perform the actions described above.
Only 'yes' will be accepted to approve.

Enter a value: yes

module.db.yandex_compute_instance.db: Creating...
module.app.yandex_compute_instance.app: Creating...
module.db.yandex_compute_instance.db: Still creating... [10s elapsed]
module.app.yandex_compute_instance.app: Still creating... [10s elapsed]
module.db.yandex_compute_instance.db: Still creating... [20s elapsed]
module.app.yandex_compute_instance.app: Still creating... [20s elapsed]
module.db.yandex_compute_instance.db: Still creating... [30s elapsed]
module.app.yandex_compute_instance.app: Still creating... [30s elapsed]
module.db.yandex_compute_instance.db: Still creating... [40s elapsed]
module.app.yandex_compute_instance.app: Still creating... [40s elapsed]
module.app.yandex_compute_instance.app: Creation complete after 46s [id=fhmqgqlo3nvevmcuc8t3]
module.db.yandex_compute_instance.db: Creation complete after 48s [id=fhm2jr74dul5hojo7uve]

Apply complete! Resources: 2 added, 0 changed, 0 destroyed.

Outputs:

external_ip_address_app = 62.84.113.74
external_ip_address_db  = 62.84.112.243
root@alex:/home/alex/myDoc/AleksandrMalinovskyi_infra/terraform/prod#
```

The status bar at the bottom indicates the active file is `terraform-2` and the current directory is `stage`.

# BM reddit-app и reddit-db в yandex cloud

The screenshot displays the Yandex Cloud console interface in Google Chrome. The browser's address bar shows the URL `console.cloud.yandex.ru/folders/b1gv4l14uqqeafgtcpr/compute/instances`. The page title is "Виртуальные машины" (Virtual Machines). A sidebar on the left contains various application icons. The main content area features a table of virtual machines with the following columns: Имя (Name), Статус (Status), ОС (OS), Платформа (Platform), vCPU, Доля vCPU (vCPU share), RAM, Прерываемая (Interruptible), Размер дисков (Disk size), Зона доступности (Availability zone), Внутренний IPv4 (Internal IPv4), Публичный IPv4 (Public IPv4), Дата создания (Creation date), and Идентификатор (Identifier). Two VMs are listed: "reddit-db" and "reddit-app", both with a "Running" status. A "Создать ВМ" (Create VM) button is located in the top right corner.

Имя	Статус	ОС	Платформа	vCPU	Доля vCPU	RAM	Прерываемая	Размер дисков	Зона доступности	Внутренний IPv4	Публичный IPv4	Дата создания	Идентификатор
reddit-db	Running	Ubuntu 20.04	Intel Broadwell	2	100 %	2 ГБ	нет	15 ГБ	ru-central1-a	10.128.0.25	62.84.112.243	24 июля 2022, в 16:29	fhm2jr74dul5hojo7uve
reddit-app	Running	Ubuntu 20.04	Intel Broadwell	2	100 %	2 ГБ	нет	15 ГБ	ru-central1-a	10.128.0.35	62.84.113.74	24 июля 2022, в 16:29	fhmeqqlo3nvevmcue8t3