#### **Membuat Resource Group**

```
az configure --defaults location=eastus
az group create -n rg-maribisnis
az configure --defaults group=rg-maribisnis
```

#### **Membuat DNS Zone**

```
az network dns zone create -n maribisnis.tik.my.id az network dns zone show -n maribisnis.tik.my.id -o jsonc
```

#### Mengambil name server lalu konfigurasikan ke cloudflare

```
→ ~ az network dns zone show -n maribisnis.tik.my.id -o jsonc {

"etag": "3459cebb-c382-416f-8d7c-a8eb75172215",

"id": "/subscriptions/00b6ba74-43e0-4dcb-b74a-6f503a0e8a8a/resisnis.tik.my.id",

"location": "global",

"maxNumberOfRecordSets": 10000,

"maxNumberOfRecordsPerRecordSet": null,

"name": "maribisnis.tik.my.id",

"nameServers": [

"ns1-38.azure-dns.com.",

"ns2-38.azure-dns.net.",

"ns3-38.azure-dns.org.",

"ns4-38.azure-dns.info."
],

"numberOfRecordSets": 2,
```

	10.000	
	4.00	
NS	maribisnis	ns4-38.azure-dns.info
NS	maribisnis	ns3-38.azure-dns.org
NS	maribisnis	ns2-38.azure-dns.net
NS	maribisnis	ns1-38.azure-dns.com

Pengecekan nameserver

```
→ ~ nslookup
> set type=NS
> maribisnis.tik.my.id
Server:
               127.0.0.53
               127.0.0.53#53
Address:
Non-authoritative answer:
                       nameserver = ns4-38.azure-dns.info.
maribisnis.tik.my.id
                       nameserver = ns3-38.azure-dns.org.
maribisnis.tik.my.id
                       nameserver = ns2-38.azure-dns.net.
maribisnis.tik.my.id
                       nameserver = ns1-38.azure-dns.com.
maribisnis.tik.my.id
```

#### Membuat Virtual Network dan Subnet

```
az network vnet create -n vnet-maribisnis --address-prefix 10.10.10.0/25

az network vnet subnet create -n sn-public --vnet-name vnet-maribisnis \
--address-prefixes 10.10.10.0/29

az network vnet subnet create -n sn-private --vnet-name vnet-maribisnis \
--address-prefixes 10.10.10.8/29 --disable-private-endpoint-network-policies true

az network vnet subnet create -n sn-public2 --vnet-name vnet-maribisnis \
--address-prefixes 10.10.10.16/29
```

#### **Membuat Public IP Address**

```
az network public-ip create -n pip-nextcloud --allocation-method Static -z 2 --sku Standard
```

```
→ ~ az network public-ip list
Name ResourceGroup Location Zones Address
----
pip-nextcloud rg-maribisnis eastus 2

20.102.42.131
```

#### Membuat DNS Record untuk IP publik

```
ID=$(az network public-ip show -n pip-nextcloud -o tsv --query "id")
az network dns record-set a create -n nextcloud --zone-name
maribisnis.tik.my.id \
--target-resource $ID
```

```
→ ~ nslookup nextcloud.maribisnis.tik.my.id

Server: 127.0.0.53

Address: 127.0.0.53#53

Non-authoritative answer:

Name: nextcloud.maribisnis.tik.my.id

Address: 20.102.42.131
```

#### Membuat NSG nextcloud

```
az network nsg create -n nsg-nextcloud
```

#### Membuat NIC nextcloud

```
az network nic create --vnet-name vnet-maribisnis --subnet sn-public \
-n nic-nextcloud --public-ip-address pip-nextcloud \
--network-security-group nsg-nextcloud
```

#### Membuat VM nextcloud

```
az vm create --name vm-nextcloud --image UbuntuLTS --size Standard_B1s \
--nics nic-nextcloud -z 2
```

#### Mengizinkan port web nextcloud

```
az vm open-port -n vm-nextcloud --port "80,443"
```

#### Membuat storage account

```
az storage account create -n stmaribisnis --sku Standard_ZRS --default-action Deny
```

#### Membuat share untuk penyimpanan nextcloud

```
az storage share create -n nextcloud-data --account-name stmaribisnis
```

#### Mengambil access key

```
az storage account keys list -n stmaribisnis --query "[].value"
```

#### Membuat private endpoint untuk storage

```
ID=$(az storage account show -n stmaribisnis -o tsv --query "id")
```

```
az network private-endpoint create -n pe-storage \
--private-connection-resource-id $ID --connection-name my-conn \
--vnet-name vnet-maribisnis --subnet sn-private --group-id file
```

az network private-dns zone create -n privatelink.file.core.windows.net

```
az network private-dns link vnet create --zone-name
privatelink.file.core.windows.net \
--name dnslink --virtual-network vnet-maribisnis --registration-enabled false
```

```
az network private-endpoint dns-zone-group create --endpoint-name pe-storage \
-n default --private-dns-zone privatelink.file.core.windows.net \
--zone-name privatelink_file_core_windows_net
```

#### Menyiapkan Azure Bastion untuk meremot vm nextcloud

```
az network public-ip create -n pip-bastion --sku Standard
```

```
az network vnet subnet create -n AzureBastionSubnet \
--address-prefixes 10.10.10.64/26 --vnet-name vnet-maribisnis
```

### Create a Bastion ...



Basics Tags Advanced Review + create

Summary

#### Basics

Name

Subscription

Resource group

Region

Virtual network

Subnets

Public IP address

Tier

Instance count

Native client support (Preview)

bt-maribisnis

Azure Pass - Sponsorship

rg-maribisnis

East US

vnet-maribisnis

AzureBastionSubnet

pip-bastion

Basic

2

Disabled

Create

Previous

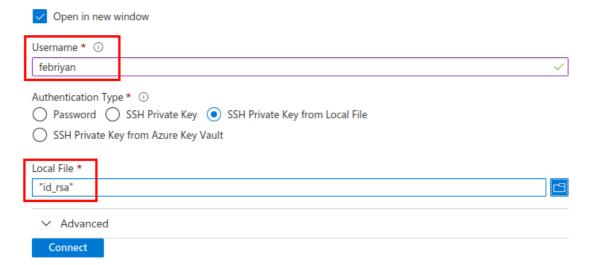
Next

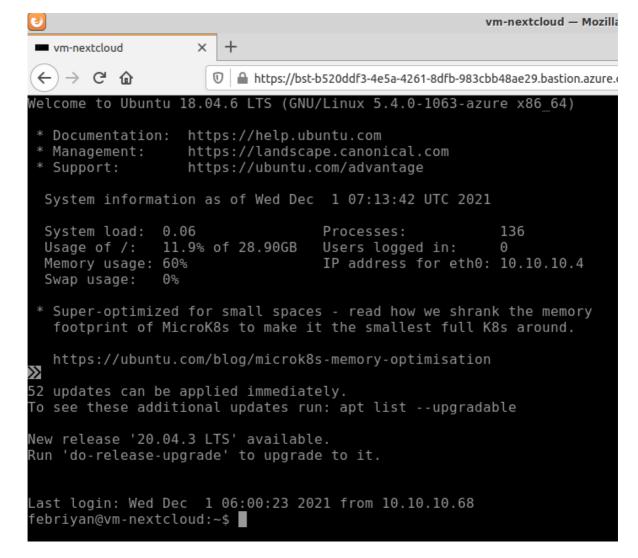
Download a template for automation



Using Bastion: bt-maribisnis, Provisioning State: Succeeded

Please enter username and password to your virtual machine to connect using Bastion.





#### Install paket software nextcloud

```
sudo add-apt-repository ppa:ondrej/php
sudo apt update
```

```
sudo apt -y install apache2 mariadb-server php7.4 python-certbot-apache unzip php7.4-curl php7.4-gd php7.4-mbstring php7.4-zip php7.4-xml php7.4-mysql php7.4-intl php7.4-bz2 php7.4-imagick -y
```

#### konfigurasi database server nextcloud

```
sudo mysql_secure_installation

create database nextcloud;

create user nextclouduser@localhost identified by 'C8MV8Xvxxb9fyqVG';

grant all privileges on *.* to nextclouduser@localhost;

flush privileges;
```

#### konfigurasi web server apache nextcloud

```
sudo a2enmod rewrite headers env dir mime ssl
```

```
sudo a2ensite nextcloud.conf
```

```
sudo a2dissite 000-default.conf
```

```
sudo systemctl reload apache2
```

```
certbot --apache -d nextcloud.maribisnis.tik.my.id -m febriyan.aji@gmail.com -
-agree-tos --redirect --staple-ocsp
```

#### Download nextcloud

```
wget https://download.nextcloud.com/server/releases/nextcloud-23.0.0.zip
```

```
unzip nextcloud-23.0.0.zip -d /var/www/
```

```
sudo chown -R www-data:www-data /var/www/nextcloud/
```

#### Mount file share nextcloud dari azure storage

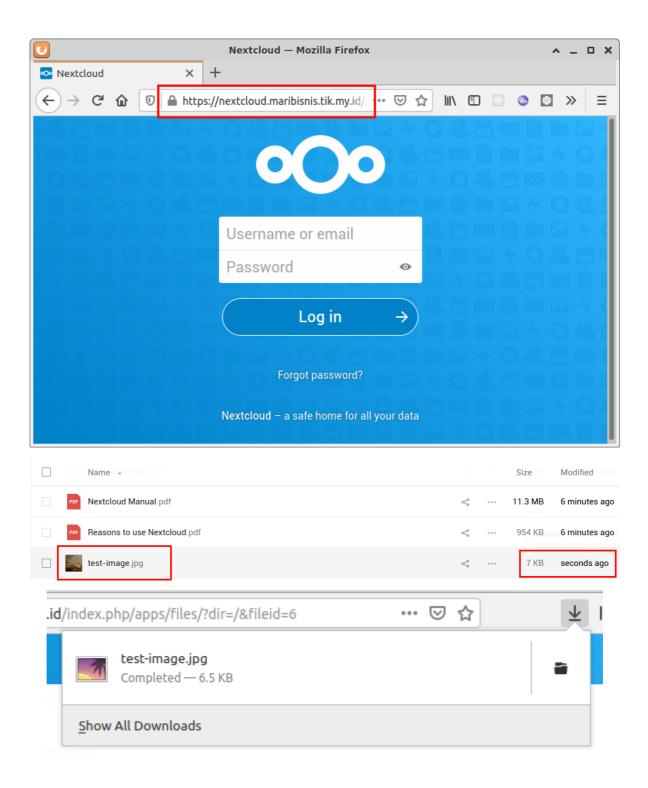
```
sudo mkdir /var/www/nextcloud/data
if [ ! -d "/etc/smbcredentials" ]; then
sudo mkdir /etc/smbcredentials
if [ ! -f "/etc/smbcredentials/stmaribisnis.cred" ]; then
    sudo bash -c 'echo "username=stmaribisnis" >>
/etc/smbcredentials/stmaribisnis.cred'
   sudo bash -c 'echo
"password=uGYBK4DWyRzHu7EXMyHVTQ3d3GIHN75H7A/cctG4ii0Pmpb0eeFvDgrdjlNkJ6wac/0V
o2JktwLJpkL094r0EQ==" >> /etc/smbcredentials/stmaribisnis.cred'
sudo chmod 600 /etc/smbcredentials/stmaribisnis.cred
sudo bash -c 'echo "//stmaribisnis.file.core.windows.net/nextcloud-data
/var/www/nextcloud/data cifs
nofail,vers=3.0,credentials=/etc/smbcredentials/stmaribisnis.cred,dir mode=077
0, file mode=0770, serverino, uid=33, gid=33" >> /etc/fstab'
sudo mount -t cifs //stmaribisnis.file.core.windows.net/nextcloud-data
/var/www/nextcloud/data -o
vers=3.0, credentials=/etc/smbcredentials/stmaribisnis.cred,dir_mode=0770,file_
mode=0770, serverino, uid=33, gid=33
```

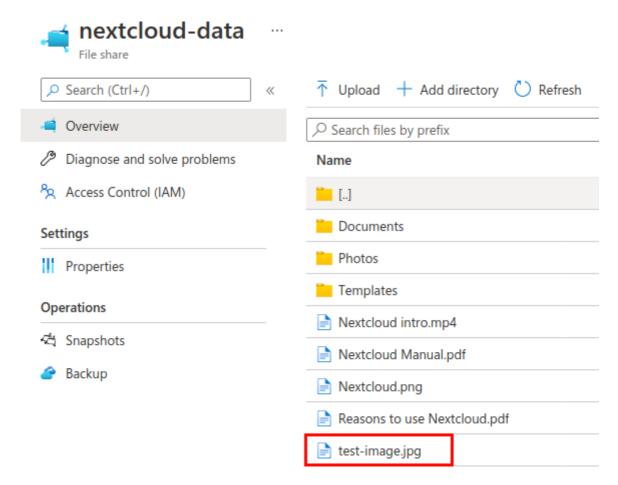
#### **Install Nextcloud**

```
sudo -u www-data php /var/www/nextcloud/occ maintenance:install --database
"mysql" --database-name "nextcloud" --database-user "nextclouduser" --
database-pass "C8MV8Xvxxb9fyqVG" --admin-user "admin" --admin-pass
"DVPh5sCEzjKMtK9m"
```

```
sudo -u www-data php /var/www/nextcloud/occ config:system:set \
trusted_domains 1 --value=nextcloud.maribisnis.tik.my.id
```

#### pengujian nextcloud





#### **Membuat SQL Server**

```
az sql server create -n sql-maribisnis -u maribisnis -p nH64R2ZK97bPDfdj -e
false
```

```
az configure --defaults sql-server=sql-maribisnis
```

az network private-endpoint dns-zone-group create \ --endpoint-name pe-sql -n default --private-dns-zone

--zone-name privatelink database windows net

```
Mengatur Private Endpoint SQL Server
 ID=$(az sql server show -n sql-maribisnis --query "id" -o tsv)
 az network private-endpoint create -n pe-sql \
 --private-connection-resource-id $ID --connection-name sql-conn \
 --vnet-name vnet-maribisnis --subnet sn-private --group-id sqlserver
 az network private-dns zone create -n privatelink.database.windows.net
 az network private-dns link vnet create --zone-name
 privatelink.database.windows.net --name dnslink --virtual-network vnet-
 maribisnis --registration-enabled false
```

privatelink.database.windows.net \

az sql db create -n sqldb-orchardcms -z true --compute-model Serverless --auto-pause-delay 60 -f Gen5 -e GeneralPurpose -c 1 --bsr Zone

#### Membuat File Share untuk website

az storage share create -n orchardcms-data --account-name stmaribisnis

#### Membuat App Service Plan untuk website

az appservice plan create -n appplan-orchardcms --is-linux --sku P1V2

#### Membuat App Service untuk website

az webapp create -p appplan-orchardcms -n app-orchardcms -i
orchardproject/orchardcore-cms-linux:latest

az webapp update -n app-orchardcms --https-only true

az network dns record-set cname create -z maribisnis.tik.my.id -n web

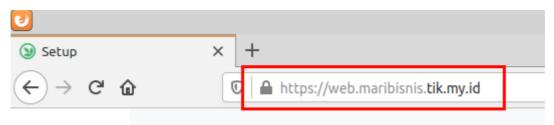
az network dns record-set cname set-record -z maribisnis.tik.my.id -n web -c app-orchardcms.azurewebsites.net

az webapp config hostname add --hostname web.maribisnis.tik.my.id --webapp-name app-orchardcms

az webapp config ssl create --hostname web.maribisnis.tik.my.id -n app-orchardcms

THUMBPRINT=\$(az webapp config ssl show --certificate-name
web.maribisnis.tik.my.id -o tsv --query "thumbprint")

az webapp config ssl bind --certificate-thumbprint \$THUMBPRINT -n apporchardcms --ssl-type SNI



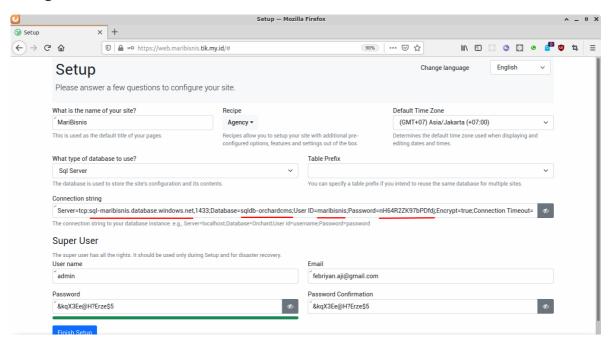
# Setup

Please answer a few questions to configure yo

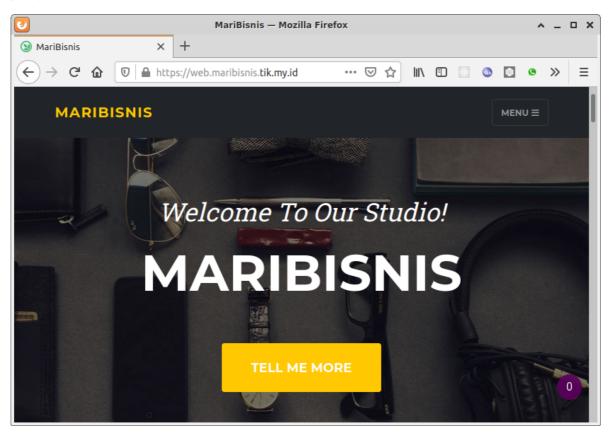
az webapp vnet-integration add -n app-orchardcms --subnet sn-public2 --vnet vnet-maribisnis

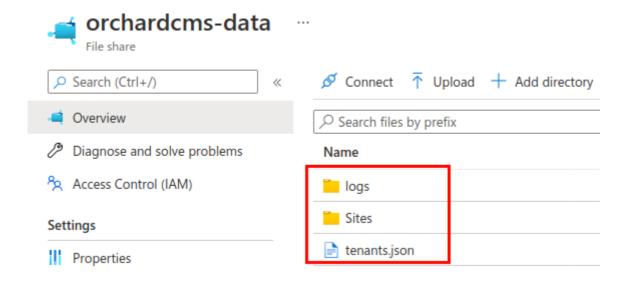
az webapp config storage-account add -n app-orchardcms --custom-id data -storage-type AzureFiles --account-name stmaribisnis --share-name orchardcmsdata --access-key
uGYBK4DWyRzHu7EXMyHVTQ3d3GIHN75H7A/cctG4ii0Pmpb0eeFvDgrdjlNkJ6wac/0Vo2JktwLJpk
L094rOEQ== --mount-path /app/App\_Data

#### Konfigurasi website



#### pengujian website





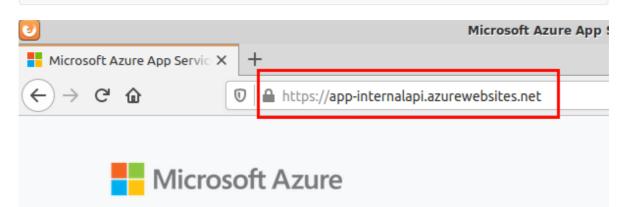
#### Membuat App Plan untuk internal API

az appservice plan create -n appplan-internalapi --is-linux --sku P1V2

#### **Membuat App Service untuk internal API**

az webapp create -p appplan-internalapi -n app-internalapi --runtime "node|14-lts"

az webapp update -n app-internalapi --https-only true



### Hey, Node developers!

Your app service is up and running.

Time to take the next step and deploy your code.

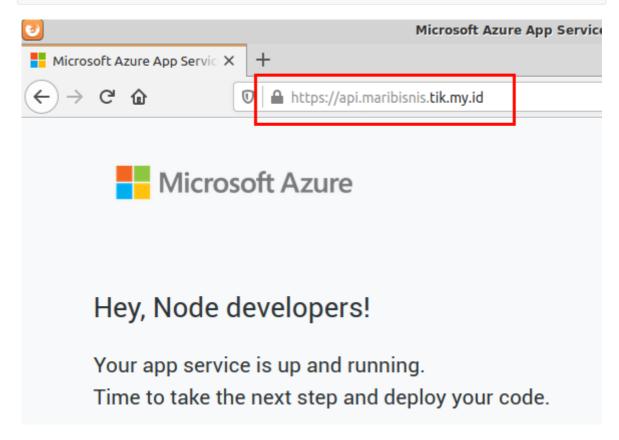
az network dns record-set cname create -z maribisnis.tik.my.id -n api

az network dns record-set cname set-record -z maribisnis.tik.my.id -n api -c app-internalapi.azurewebsites.net

az webapp config hostname add --hostname api.maribisnis.tik.my.id --webapp-name app-internalapi

az webapp config ssl create --hostname api.maribisnis.tik.my.id -n app-internalapi
THUMBPRINT=\$(az webapp config ssl show --certificate-name
api.maribisnis.tik.my.id -o tsv --query "thumbprint")

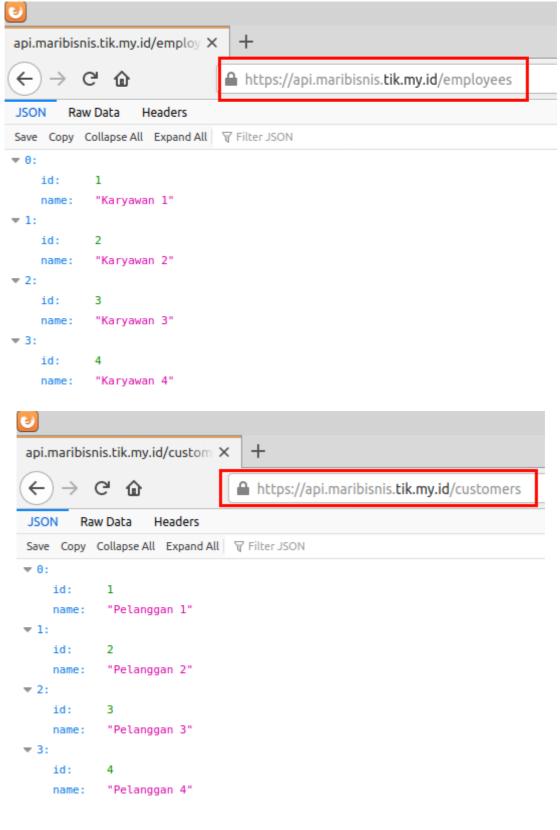
az webapp config ssl bind --certificate-thumbprint \$THUMBPRINT -n app-internalapi --ssl-type SNI



#### **Deploy souce code internal API**

```
zip -r deploy.zip internal-api/
```

az webapp deploy -n app-internalapi --src-path deploy.zip



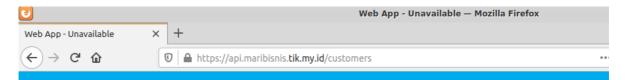
#### Membuat private endpoint untuk internal api

```
ID=$(az webapp show -n app-internalapi --query "id" -o tsv)

az network private-endpoint create -n pe-internalapi \
--private-connection-resource-id $ID --connection-name internalapi-conn \
--vnet-name vnet-maribisnis --subnet sn-private --group-id sites
```

az network private-dns zone create -n privatelink.azurewebsites.net
az network private-dns link vnet create --zone-name
privatelink.azurewebsites.net --name dnslink --virtual-network vnet-maribisnis
--registration-enabled false

az network private-endpoint dns-zone-group create --endpoint-name peinternalapi -n default --private-dns-zone privatelink.azurewebsites.net -zone-name privatelink\_azurewebsites\_net



## Error 403 - Forbidden

The web app you have attempted to reach has blocked your access.

febriyan@vm-nextcloud:~\$ nslookup api.maribisnis.tik.my.id

Server: 127.0.0.53
Address: 127.0.0.53#53

Non-authoritative answer:
api.maribisnis.tik.my.id canonical name = app-internalapi.azurewebsites.net.
app-internalapi.azurewebsites.net canonical name = app-internalapi.privatelink.azurewebsites.net.

Name: app-internalapi.privatelink.azurewebsites.net

Address: 10.10.10.14