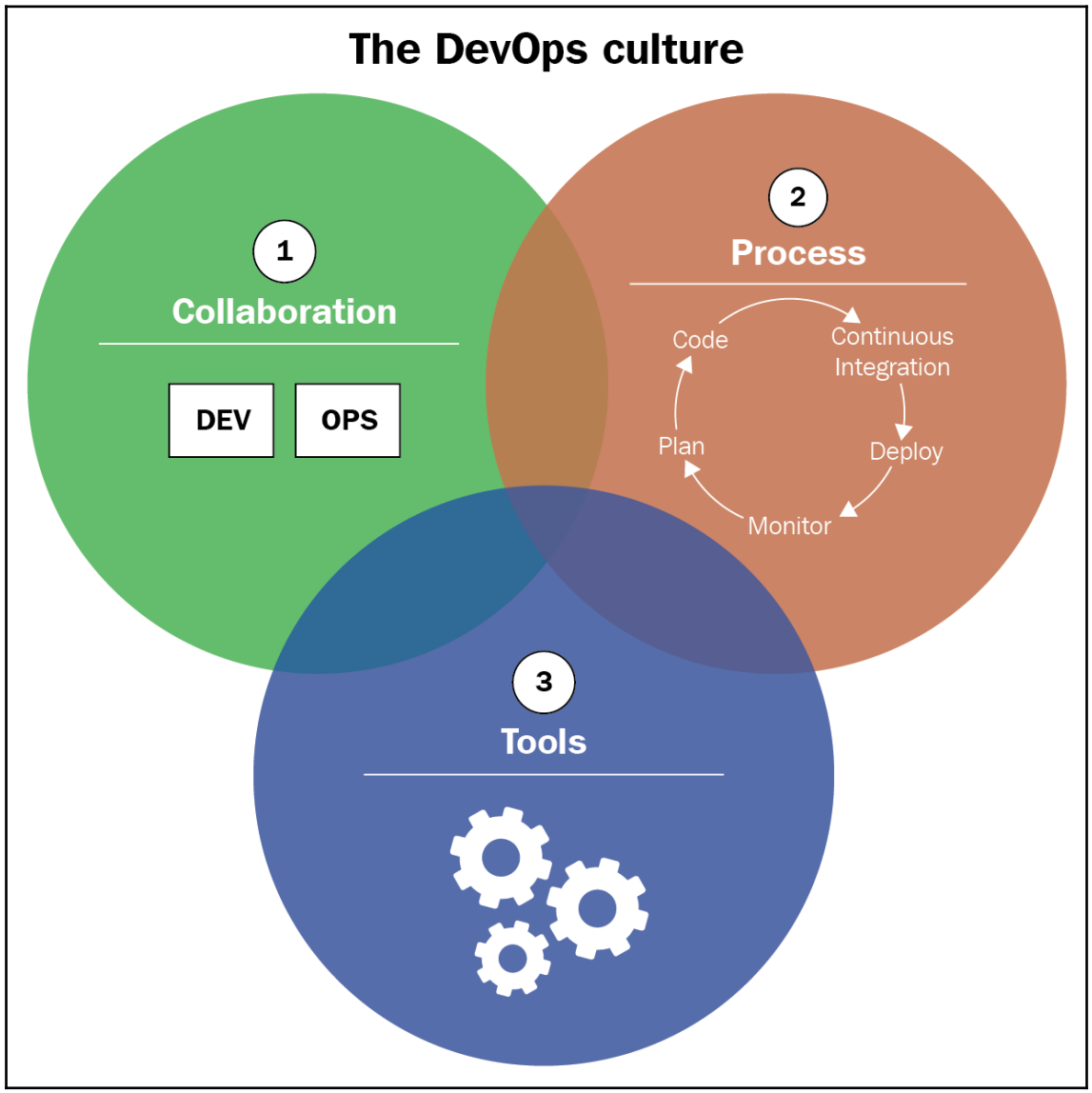
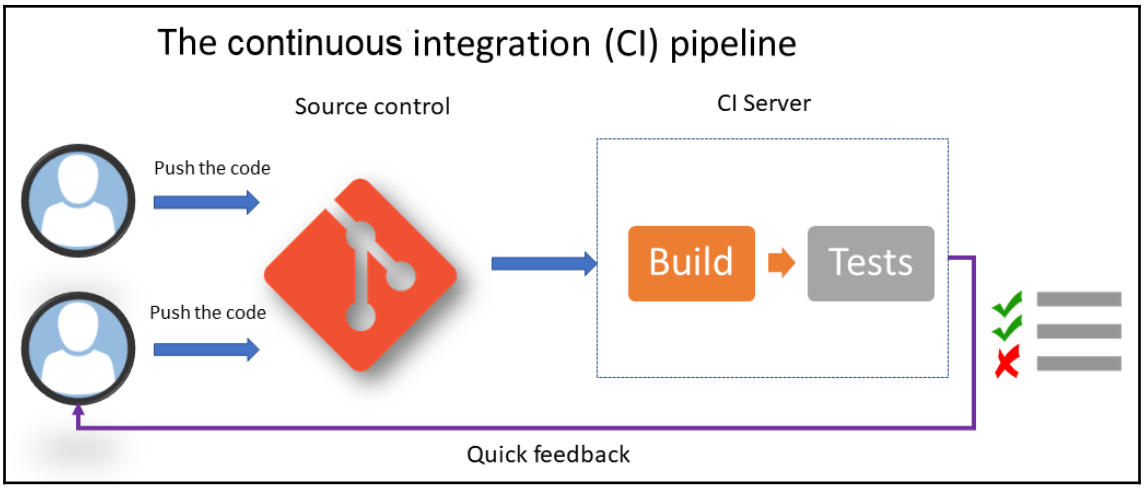
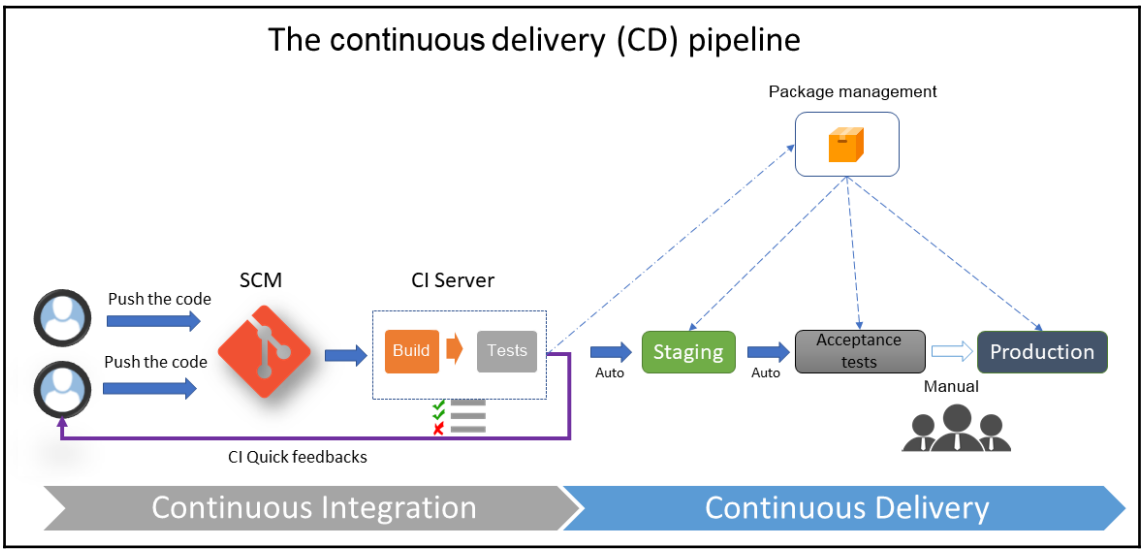
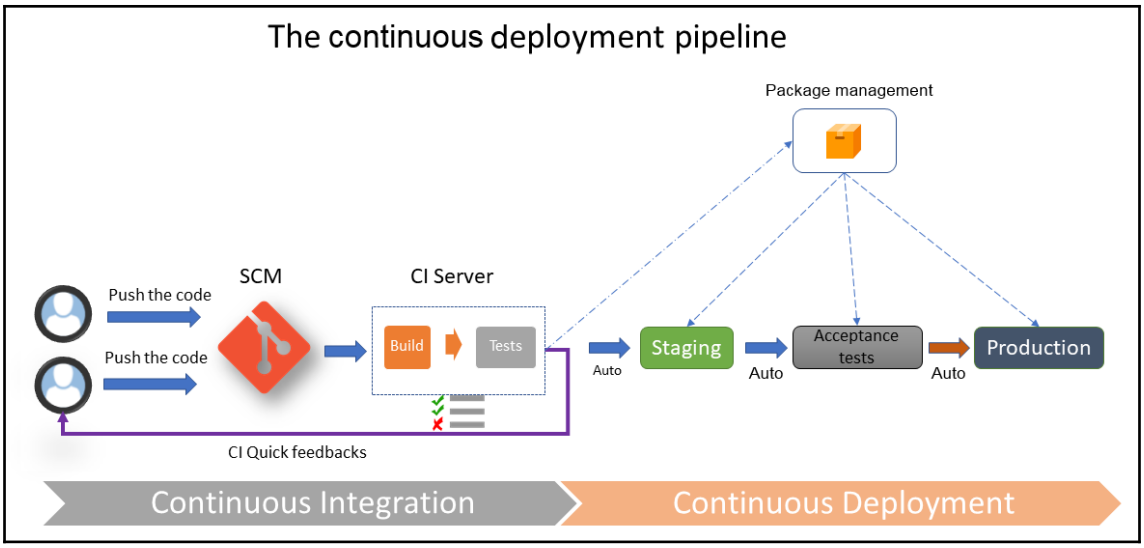
Chapter 1: DevOps Culture and Practices




The continuous integration (CI) pipeline
Source control
CI Server
Push the code
Push the code
Build
Tests
Quick feedback

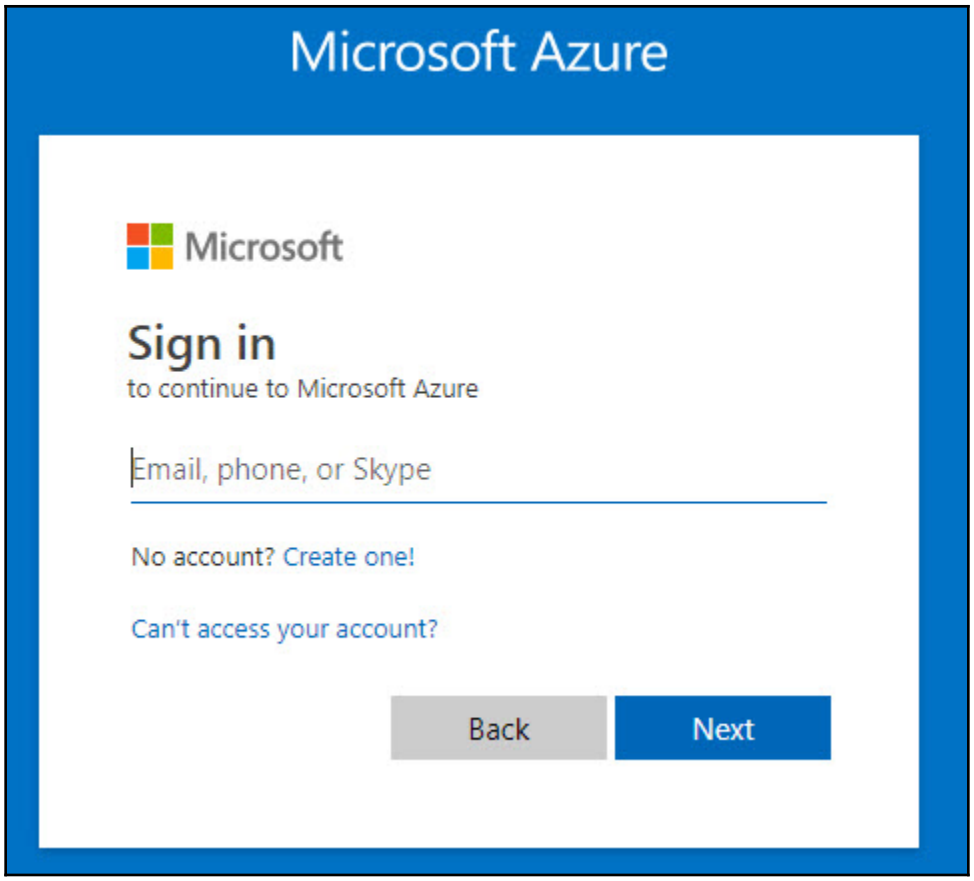

The continuous delivery (CD) pipeline
Package management
SCM
CI Server
Push the code
Push the code
Build
Tests
Auto
Staging
Auto
Acceptance tests
Production
Manual
CI Quick feedbacks
Continuous Integration
Continuous Delivery

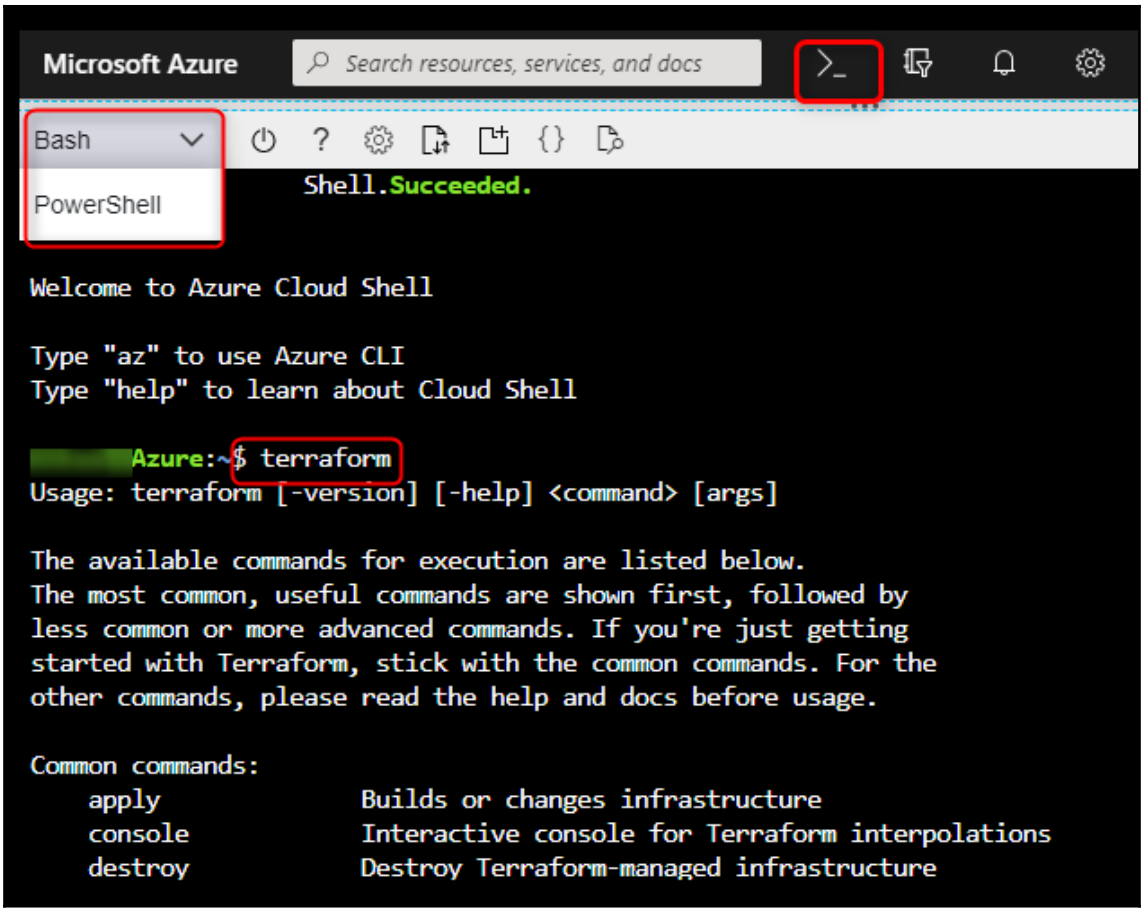

The continuous deployment pipeline
Package management
SCM
CI Server
Push the code
Push the code
Build
Tests
Auto
Staging
Auto
Acceptance tests
Auto
Production
CI Quick feedbacks
Continuous Integration
Continuous Deployment

Chapter 2: Provisioning Cloud Infrastructure with Terraform

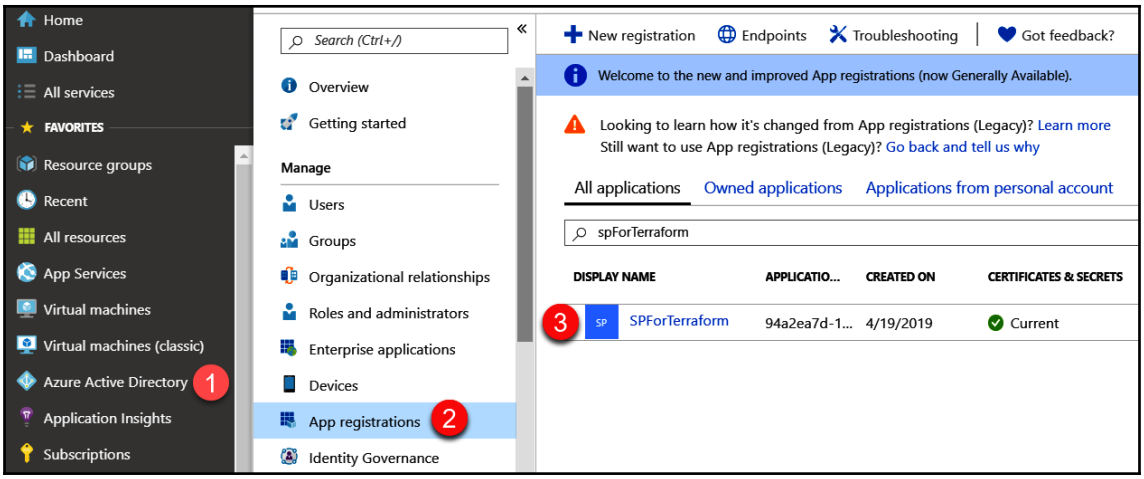
```
root@m      :/home/          # curl -Os https://releases.hashicorp.com/terraform/${TERRAFORM_VERSION}/terraform_${TERRAF
ORM_VERSION}_linux_amd64.zip     && curl -Os https://releases.hashicorp.com/terraform/${TERRAFORM_VERSION}/terraform_${T
ERRAFORM_VERSION}_SHA256SUMS     && curl https://keybase.io/hashicorp/pgp_keys.asc | gpg --import     && curl -Os https:
//releases.hashicorp.com/terraform/${TERRAFORM_VERSION}/terraform_${TERRAFORM_VERSION}_SHA256SUMS.sig     && gpg --verif
y terraform_${TERRAFORM_VERSION}_SHA256SUMS.sig terraform_${TERRAFORM_VERSION}_SHA256SUMS     && shasum -a 256 -c terraf
orm_${TERRAFORM_VERSION}_SHA256SUMS 2>&1 | grep "${TERRAFORM_VERSION}_linux_amd64.zip:\sOK"     && unzip -o terraform_${
TERRAFORM_VERSION}_linux_amd64.zip -d /usr/local/bin
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  1696  100  1696    0     0   2753      0 --:--:-- --:--:-- --:--:--  2753
gpg: key 51852D87348FFC4C: "HashiCorp Security <security@hashicorp.com>" not changed
gpg: Total number processed: 1
gpg:              unchanged: 1
gpg: Signature made Tue Mar 12 20:19:21 2019 STD
gpg:                using RSA key 51852D87348FFC4C
gpg: Good signature from "HashiCorp Security <security@hashicorp.com>" [unknown]
gpg: WARNING: This key is not certified with a trusted signature!
gpg:          There is no indication that the signature belongs to the owner.
Primary key fingerprint: 91A6 E7F8 5D05 C656 30BE  F189 5185 2D87 348F FC4C
terraform_0.11.13_linux_amd64.zip: OK
Archive:  terraform_0.11.13_linux_amd64.zip
  inflating: /usr/local/bin/terraform
root@mkrief:/home/          #
```

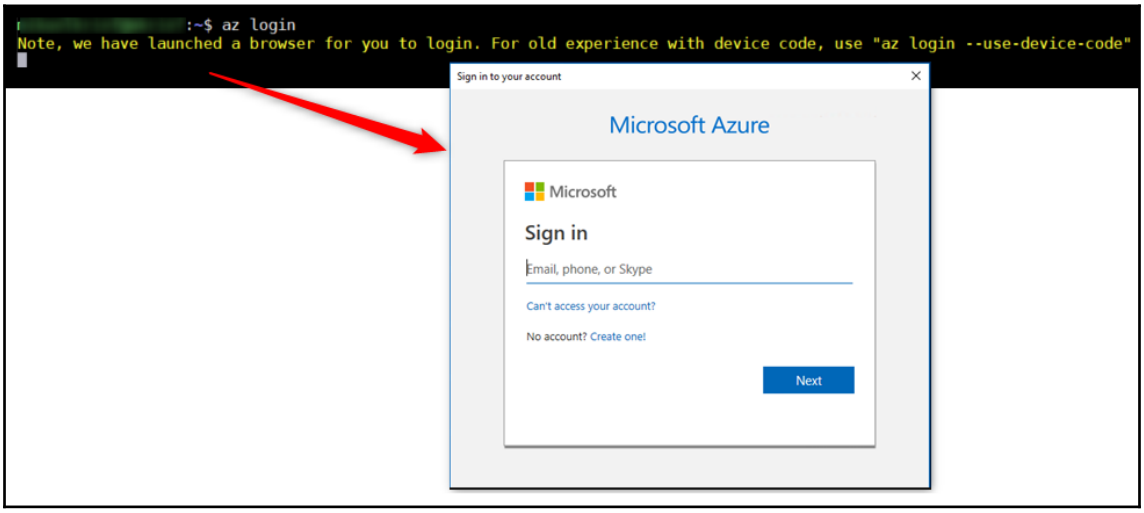
```
PS C:\WINDOWS\system32> choco install terraform -y
Chocolatey v0.10.7
Installing the following packages:
terraform
By installing you accept licenses for the packages.
Progress: Downloading terraform 0.11.13... 100%

terraform v0.11.13 [Approved]
terraform package files install completed. Performing other installation steps.
Removing old terraform plugins
Downloading terraform 64 bit
  from 'https://releases.hashicorp.com/terraform/0.11.13/terraform_0.11.13_windows_amd64.zip'
Progress: 100% - Completed download of C:\Users\Mikael\AppData\Local\Temp\chocolatey\terraform\0.11.13\terraform_0.11.13
_windows_amd64.zip (20.18 MB).
Download of terraform_0.11.13_windows_amd64.zip (20.18 MB) completed.
Hashes match.
Extracting C:\Users\Mikael\AppData\Local\Temp\chocolatey\terraform\0.11.13\terraform_0.11.13_windows_amd64.zip to C:\Pro
gramData\chocolatey\lib\terraform\tools...
C:\ProgramData\chocolatey\lib\terraform\tools
 ShimGen has successfully created a shim for terraform.exe
 The install of terraform was successful.
  Software installed to 'C:\ProgramData\chocolatey\lib\terraform\tools'

Chocolatey installed 1/1 packages.
 See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).
PS C:\WINDOWS\system32>
```

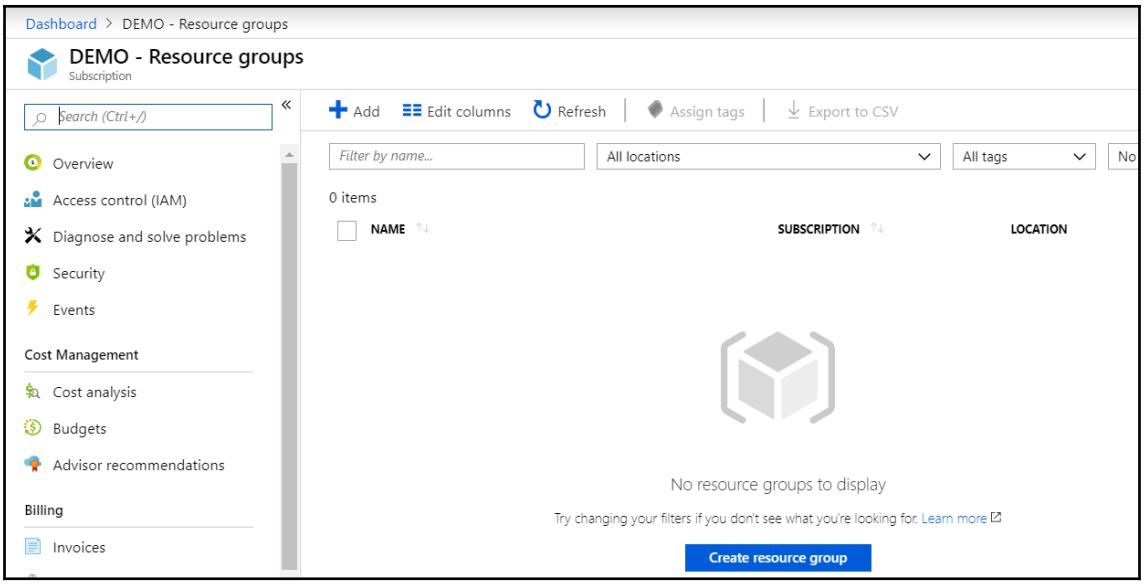

Microsoft Azure
Microsoft
Sign in
to continue to Microsoft Azure
Email, phone, or Skype
No account? Create one!
Can't access your account?
Back
Next


Microsoft Azure
Search resources, services, and docs
Bash
PowerShell
Shell.Succeeded.
Welcome to Azure Cloud Shell
Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell
Azure:~$ terraform
Usage: terraform [-version] [-help] <command> [args]
The available commands for execution are listed below.
The most common, useful commands are shown first, followed by
less common or more advanced commands. If you're just getting
started with Terraform, stick with the common commands. For the
other commands, please read the help and docs before usage.
Common commands:
apply Builds or changes infrastructure
console Interactive console for Terraform interpolations
destroy Destroy Terraform-managed infrastructure

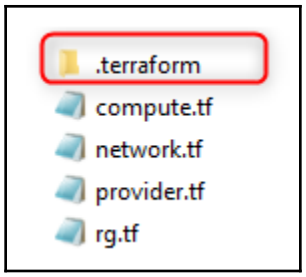
Bash
Type "az" to use Azure CLI 2.0
Type "help" to learn about Cloud Shell
mikael@Azure:~$ az ad sp create-for-rbac --name="SPForTerraform" --role="Contributor" --scopes="/subscriptions/1da42ac9-ee3e-4fdb-
Changing "SPForTerraform" to a valid URI of "http://SPForTerraform", which is the required format used for service principal names
Retrying role assignment creation: 1/36
{
"appId": "94a2ea7d-10c9-46b3-803
"displayName": "SPForTerraform",
"name": "http://SPForTerraform",
"password": "a1ca14d7-0aa0-
"tenant": "2e3a33f9-
}
Client ID
Client Secret
Tenant ID


Home
Dashboard
All services
FAVORITES
Resource groups
Recent
All resources
App Services
Virtual machines
Virtual machines (classic)
Azure Active Directory
1
Application Insights
Subscriptions
Search (Ctrl+/)
Overview
Getting started
Manage
Users
Groups
Organizational relationships
Roles and administrators
Enterprise applications
Devices
App registrations
2
Identity Governance
New registration
Endpoints
Troubleshooting
Got feedback?
Welcome to the new and improved App registrations (now Generally Available).
Looking to learn how it's changed from App registrations (Legacy)? Learn more
Still want to use App registrations (Legacy)? Go back and tell us why
All applications
Owned applications
Applications from personal account
spForTerraform
DISPLAY NAME
APPLICATIO...
CREATED ON
CERTIFICATES & SECRETS
3
SP
SPForTerraform
94a2ea7d-1...
4/19/2019
Current


:~$ az login
Note, we have launched a browser for you to login. For old experience with device code, use "az login --use-device-code"
Sign in to your account
Microsoft Azure
Microsoft
Sign in
Email, phone, or Skype
Can't access your account?
No account? Create one!
Next



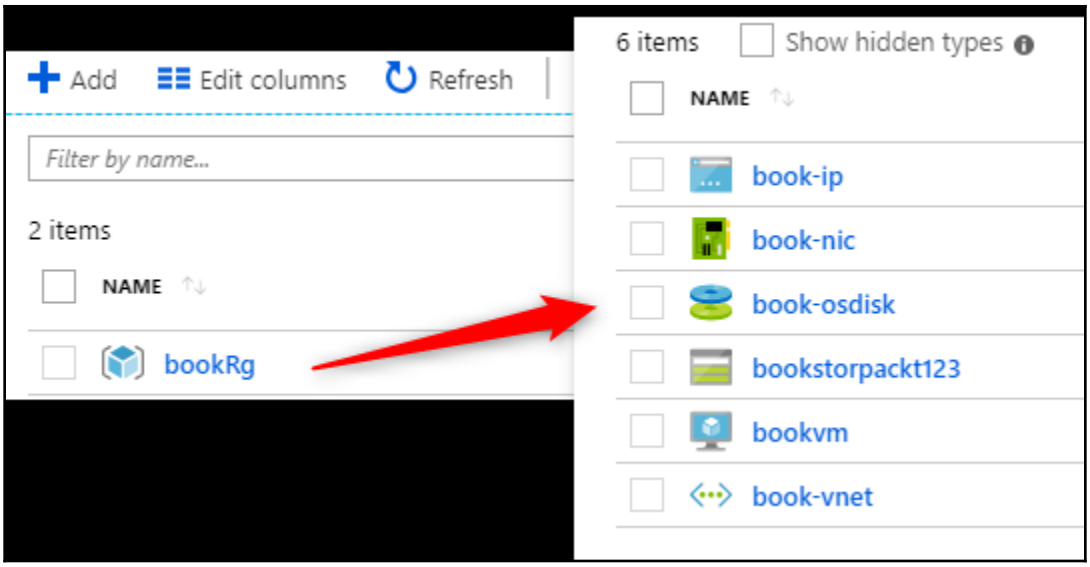

```
[redacted]:/mnt/d/DevOps/Learning-DevOps/CHAP02/terraform_separate_files$ terraform

Initializing provider plugins...
- Checking for available provider plugins on https://releases.hashicorp.com...
- Downloading plugin for provider "azurerm" (1.25.0)...

The following providers do not have any version constraints in configuration,
so the latest version was installed.

To prevent automatic upgrades to new major versions that may contain breaking
changes, it is recommended to add version = "..." constraints to the
corresponding provider blocks in configuration, with the constraint strings
suggested below.

* provider.azurerm: version = "~> 1.25"

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
```


.terraform
compute.tf
network.tf
provider.tf
rg.tf

```
                    :/mnt/d/DevOps/Learning-DevOps/CHAP02/terraform_separate_files$ terraform plan
Refreshing Terraform state in-memory prior to plan...
The refreshed state will be used to calculate this plan, but will not be
persisted to local or remote state storage.


------------------------------------------------------------------------

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:

  + azurerm_network_interface.nic
      id:                                                          <computed>
      applied_dns_servers.#:                                       <computed>
      dns_servers.#:                                               <computed>
      enable_accelerated_networking:                               "false"
      enable_ip_forwarding:                                        "false"
      internal_dns_name_label:                                     <computed>
      internal_fqdn:                                               <computed>
      ip_configuration.#:                                          "1"
      ip_configuration.0.application_gateway_backend_address_pools_ids.#: <computed>
      ip_configuration.0.application_security_group_ids.#:         <computed>
      ip_configuration.0.load_balancer_backend_address_pools_ids.#: <computed>
      ip_configuration.0.load_balancer_inbound_nat_rules_ids.#:    <computed>
      ip_configuration.0.name:                                     "bookipconfig"
      ip_configuration.0.primary:                                  <computed>
      ip_configuration.0.private_ip_address_allocation:            "dynamic"
      ip_configuration.0.private_ip_address_version:               "IPv4"
      ip_configuration.0.public_ip_address_id:                     "${azurerm_public_ip.pip.id}"
      ip_configuration.0.subnet_id:                                "${azurerm_subnet.subnet.id}"
      location:                                                    "westeurope"
  + azurerm_virtual_network.vnet
      id:                                                          <computed>
      address_space.#:                                             "1"
      address_space.0:                                             "10.0.0.0/16"
      location:                                                    "westeurope"
      name:                                                        "book-vnet"
      resource_group_name:                                         "bookRg"
      subnet.#:                                                    <computed>
      tags.%:                                                      <computed>


Plan: 7 to add, 0 to change, 0 to destroy.

------------------------------------------------------------------------

Note: You didn't specify an "-out" parameter to save this plan, so Terraform
can't guarantee that exactly these actions will be performed if
```

```
                    :/mnt/d/DevOps/Learning-DevOps/CHAP02/terraform_separate_files$ terraform apply

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:

  + azurerm_network_interface.nic
      id:                                                       <computed>
      applied_dns_servers.#:                                    <computed>
      tags.%:                                                   <computed>


Plan: 7 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:
```

```
    Only 'yes' will be accepted to approve.

    Enter a value: yes

 azurerm_resource_group.rg: Creating...
   location:         "" => "westeurope"
   name:             "" => "bookRg"
   tags.%:           "" => "1"
   tags.environment: "" => "Terraform Azure"

 azurerm_virtual_machine.vm: Still creating... (2m30s elapsed)
 azurerm_virtual_machine.vm: Creation complete after 2m32s (ID: /subscriptions/1da42a

 apply complete! Resources: 7 added, 0 changed, 0 destroyed.
```



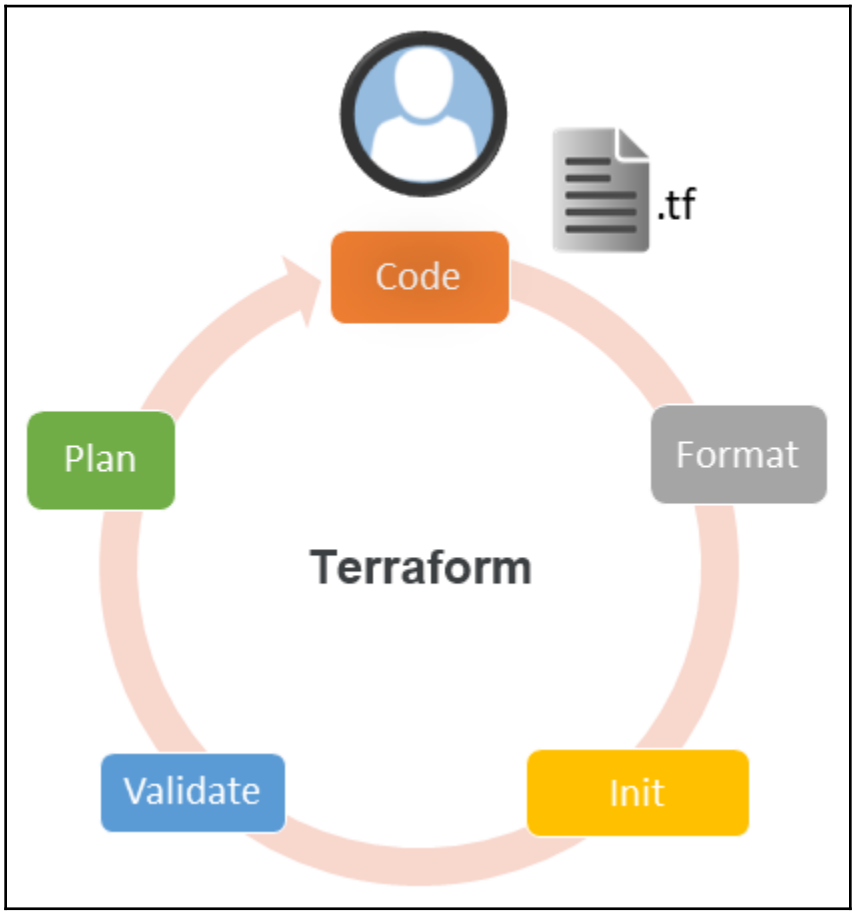

```
[redacted]:/mnt/d/DevOps/Learning-DevOps/CHAP02/terraform_separate_files$ terraform destroy
azurerm_resource_group.rg: Refreshing state... (ID: /subscriptions/1da42ac9-ee3e-4fdb-b294-f7a607f589d5/resourceGroups/bookRg)
azurerm_storage_account.stor: Refreshing state... (ID: /subscriptions/1da42ac9-ee3e-4fdb-b294-...orage/storageAccounts/bookstorpackt123)
azurerm_public_ip.pip: Refreshing state... (ID: /subscriptions/1da42ac9-ee3e-4fdb-b294-...soft.Network/publicIPAddresses/book-ip)
azurerm_virtual_network.vnet: Refreshing state... (ID: /subscriptions/1da42ac9-ee3e-4fdb-b294-...soft.Network/virtualNetworks/book-vnet)
azurerm_subnet.subnet: Refreshing state... (ID: /subscriptions/1da42ac9-ee3e-4fdb-b294-...Networks/book-vnet/subnets/book-subnet)
azurerm_network_interface.nic: Refreshing state... (ID: /subscriptions/1da42ac9-ee3e-4fdb-b294-...oft.Network/networkInterfaces/book-nic)
azurerm_virtual_machine.vm: Refreshing state... (ID: /subscriptions/1da42ac9-ee3e-4fdb-b294-...crosoft.Compute/virtualMachines/bookvm)

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

Terraform will perform the following actions:

  - azurerm_network_interface.nic

  - azurerm_public_ip.pip

  - azurerm_resource_group.rg

  - azurerm_storage_account.stor

  - azurerm_subnet.subnet

  - azurerm_virtual_machine.vm

  - azurerm_virtual_network.vnet


Plan: 0 to add, 0 to change, 7 to destroy.

Do you really want to destroy all resources?
  Terraform will destroy all your managed infrastructure, as shown above.
  There is no undo. Only 'yes' will be accepted to confirm.

  Enter a value:
```

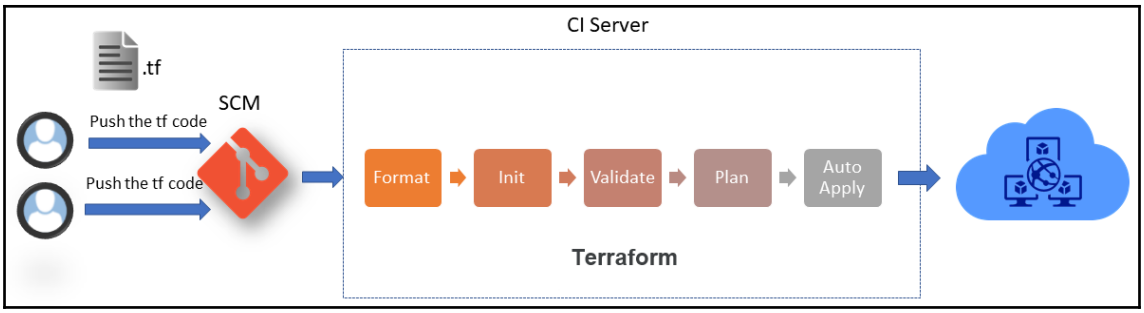
```
azurerm_resource_group.rg: Still destroying... (ID: /subscriptions/1da42ac9-ee3e-4fdb-b294-f7a607f589d5/resourceGroups/bookRg, 2m40s elapsed)
azurerm_resource_group.rg: Destruction complete after 2m47s

Destroy complete! Resources: 7 destroyed.
```

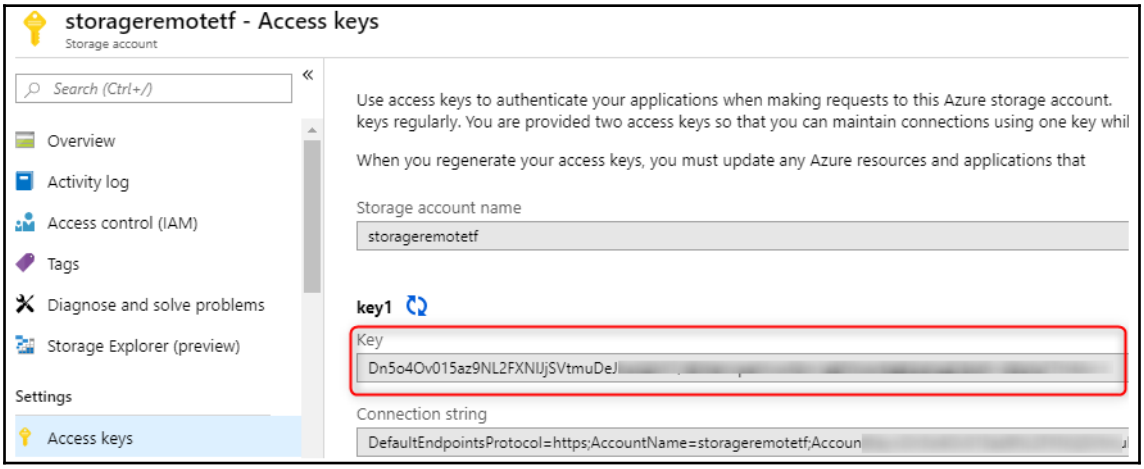
```
/d/Repos/Learning-DevOps/CHAP02/terraform_separate_files# terraform fmt
compute.tf
network.tf
provider.tf
rg.tf
```

```
:/d/Repos/Learning-DevOps/CHAP02/terraform_vars_interp# terraform plan

Error: resource 'azurerm_public_ip.pip' config: unknown variable referenced: 'ip-name'; define it with a 'variable' block
```

```
:/d/Repos/Learning-DevOps/CHAP02/terraform_vars_interp# terraform validate

Error: resource 'azurerm_public_ip.pip' config: unknown variable referenced: 'ip-name'; define it with a 'variable' block
```





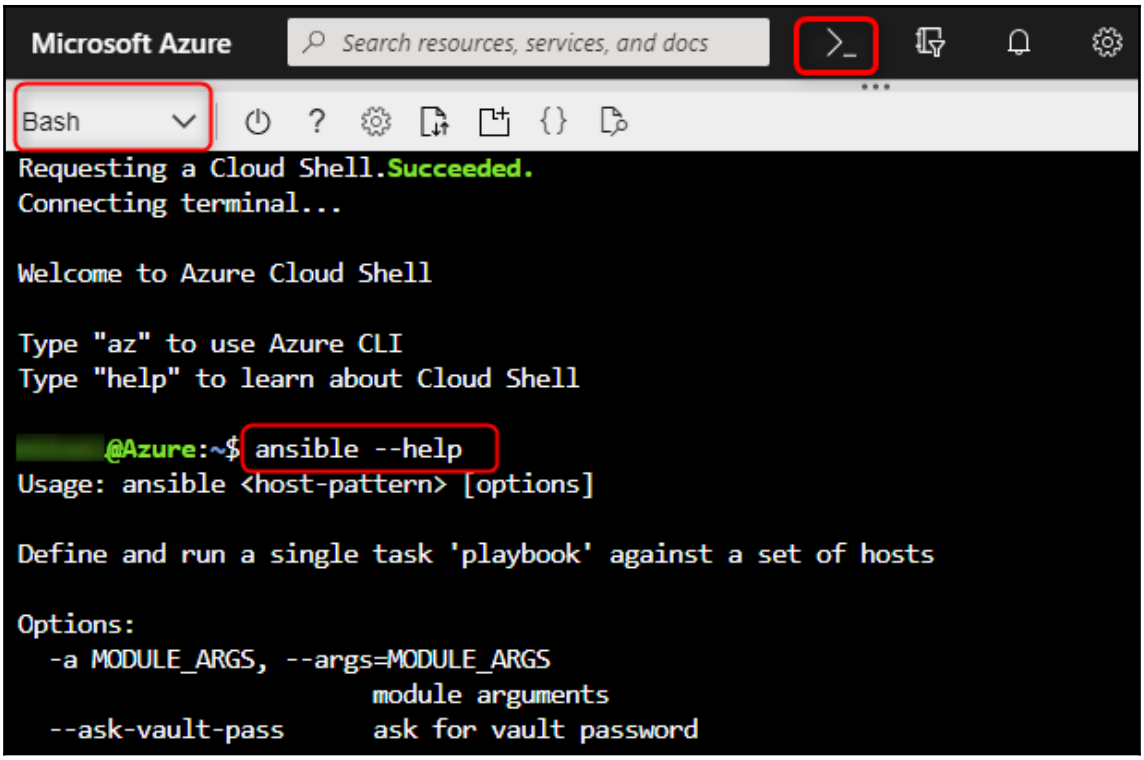



```
mikaelkrief@mkrief:/mnt/d/DevOps/Learning-DevOps/CHAP02/terraform_vars_interp$ export ARM_ACCESS_KEY=Dn5o4Ov015
mikaelkrief@mkrief:/mnt/d/DevOps/Learning-DevOps/CHAP02/terraform_vars_interp$ terraform init -backend-config="backend.tfvars"

Initializing the backend...

Successfully configured the backend "azurerm"! Terraform will automatically
use this backend unless the backend configuration changes.

Initializing provider plugins...
- Checking for available provider plugins on https://releases.hashicorp.com...
- Downloading plugin for provider "azurerm" (1.25.0)...

The following providers do not have any version constraints in configuration,
so the latest version was installed.

To prevent automatic upgrades to new major versions that may contain breaking
changes, it is recommended to add version = "..." constraints to the
corresponding provider blocks in configuration, with the constraint strings
suggested below.

* provider.azurerm: version = "~> 1.25"

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
```

Chapter 3: Using Ansible for Configuring IaaS Infrastructure

```
mikael@vmAnsible:~$ ansible --version
ansible 2.8.3
  config file = /etc/ansible/ansible.cfg
  configured module search path = [u'/home/mikael/.ansible/plugins/modules', u'/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python2.7/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 2.7.15+ (default, Oct  7 2019, 17:39:04) [GCC 7.4.0]
```

```
                    :~$ ansible --help
Usage: ansible <host-pattern> [options]

Define and run a single task 'playbook' against a set of hosts

Options:
  -a MODULE_ARGS, --args=MODULE_ARGS
                        module arguments
  --ask-vault-pass      ask for vault password
  -B SECONDS, --background=SECONDS
                        run asynchronously, failing after X seconds
                        (default=N/A)
  -C, --check           don't make any changes; instead, try to predict some
                        of the changes that may occur
  -D, --diff            when changing (small) files and templates, show the
                        differences in those files; works great with --check
  -e EXTRA_VARS, --extra-vars=EXTRA_VARS
                        set additional variables as key=value or YAML/JSON, if
```

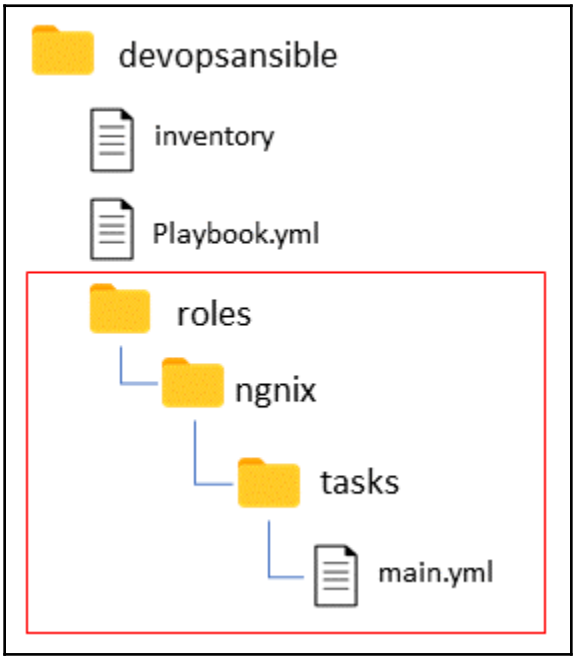

Microsoft Azure
Search resources, services, and docs
Bash
Requesting a Cloud Shell.Succeeded.
Connecting terminal...
Welcome to Azure Cloud Shell
Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell
@Azure:~$ ansible --help
Usage: ansible <host-pattern> [options]
Define and run a single task 'playbook' against a set of hosts
Options:
-a MODULE_ARGS, --args=MODULE_ARGS
module arguments
--ask-vault-pass
ask for vault password

```
# config file for ansible -- https://ansible.com/
# ===============================================

# nearly all parameters can be overridden in ansible-playbook
# or with command line flags. ansible will read ANSIBLE_CONFIG,
# ansible.cfg in the current working directory, .ansible.cfg in
# the home directory or /etc/ansible/ansible.cfg, whichever it
# finds first

[defaults]

# some basic default values...

#inventory      = /etc/ansible/hosts
#library        = /usr/share/my_modules/
#module_utils   = /usr/share/my_module_utils/
#remote_tmp     = ~/.ansible/tmp
#local_tmp      = ~/.ansible/tmp
#plugin_filters_cfg = /etc/ansible/plugin_filters.yml
#forks          = 5
#poll_interval  = 15
#sudo_user      = root
#ask_sudo_pass = True
#ask_pass      = True
#transport      = smart
#remote_port    = 22
#module_lang    = C
#module_set_locale = False
```

```
[redacted]:/home/n[redacted]# ansible-config view
# config file for ansible -- https://ansible.com/
# ===============================================

# nearly all parameters can be overridden in ansible-playbook
# or with command line flags. ansible will read ANSIBLE_CONFIG,
# ansible.cfg in the current working directory, .ansible.cfg in
# the home directory or /etc/ansible/ansible.cfg, whichever it
# finds first

[defaults]

# some basic default values...

#inventory      = /etc/ansible/hosts
#library        = /usr/share/my_modules/
#module_utils   = /usr/share/my_module_utils/
#remote_tmp     = ~/.ansible/tmp
#local_tmp      = ~/.ansible/tmp
#plugin_filters_cfg = /etc/ansible/plugin_filters.yml
#forks          = 5
#poll_interval  = 15
#sudo_user      = root
#ask_sudo_pass = True
#ask_pass      = True
#transport      = smart
#remote_port    = 22
#module_lang    = C
#module_set_locale = False
```

```
/devopsansible# ansible -i inventory  all -u demobook -m ping
webserver2 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
database1 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
webserver1 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
```

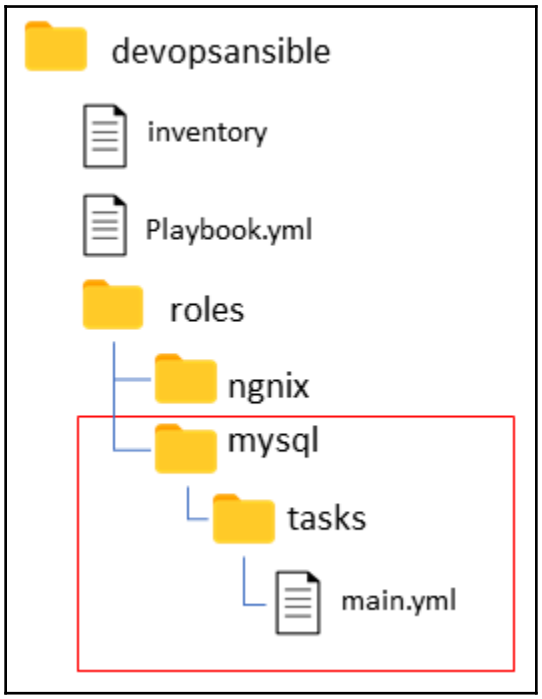
```
/devopsansible# ansible -i inventory  webserver -u demobook -m ping
webserver1 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
webserver2 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
```



```
[redacted]/devopsansible# ansible-playbook -i inventory playbook.yml --check

PLAY [webserver] ***************************************************************

TASK [Gathering Facts] *********************************************************
ok: [webserver1]
ok: [webserver2]

TASK [ngnix : install and check nginx latest version] **************************
changed: [webserver1]
changed: [webserver2]

TASK [ngnix : start nginx] *****************************************************
changed: [webserver2]
changed: [webserver1]

PLAY RECAP *********************************************************************
webserver1                 : ok=3    changed=2    unreachable=0    failed=0
webserver2                 : ok=3    changed=2    unreachable=0    failed=0
```

```
[redacted]/devopsansible# ansible-playbook -i inventory playbook.yml

PLAY [webserver] ***************************************************************

TASK [Gathering Facts] *********************************************************
ok: [webserver1]
ok: [webserver2]

TASK [ngnix : install and check nginx latest version] **************************
ok: [webserver2]
ok: [webserver1]

TASK [ngnix : start nginx] *****************************************************
ok: [webserver1]
ok: [webserver2]

PLAY RECAP *********************************************************************
webserver1                 : ok=3    changed=0    unreachable=0    failed=0
webserver2                 : ok=3    changed=0    unreachable=0    failed=0
```

```
[redacted]/devopsansible# ansible-playbook -i inventory playbook.yml --check

PLAY [webserver] ***************************************************************

TASK [Gathering Facts] *********************************************************
ok: [webserver1]
ok: [webserver2]

TASK [ngnix : install and check nginx latest version] **************************
changed: [webserver1]
changed: [webserver2]

TASK [ngnix : start nginx] *****************************************************
changed: [webserver2]
changed: [webserver1]

PLAY RECAP *********************************************************************
webserver1                 : ok=3    changed=2    unreachable=0    failed=0
webserver2                 : ok=3    changed=2    unreachable=0    failed=0
```

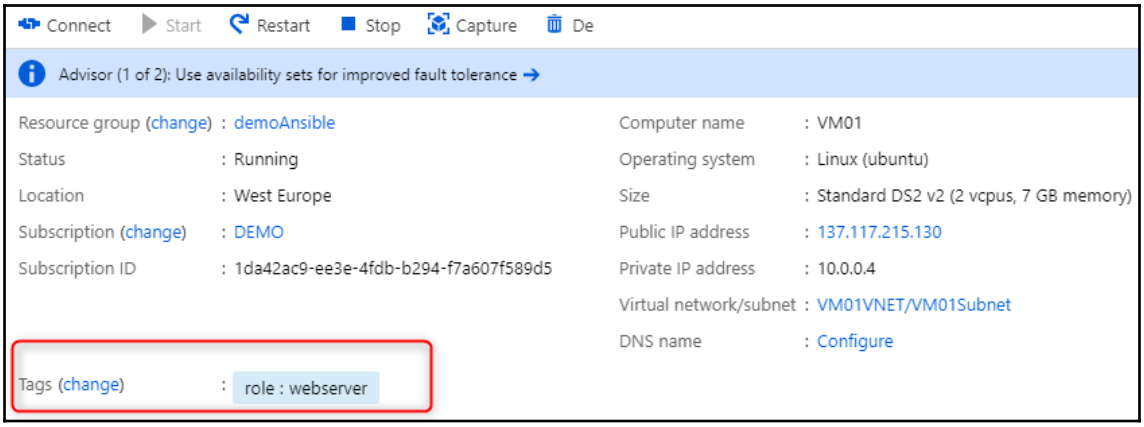


```
root@DESKTOP-9Q2U73J:/d/devopsansible# ansible-playbook -i inventory playbook.yml

PLAY [webserver] ***************************************************************************************

TASK [Gathering Facts] *********************************************************************************
ok: [webserver1]
ok: [webserver2]

TASK [ngnix : install and check nginx latest version] **************************************************
ok: [webserver1]
ok: [webserver2]

TASK [ngnix : start nginx] *****************************************************************************
ok: [webserver1]
ok: [webserver2]

PLAY [database] ****************************************************************************************

TASK [Gathering Facts] *********************************************************************************
ok: [database1]

TASK [mysql : Update apt cache] ************************************************************************
ok: [database1]

TASK [mysql : Install required software] ***************************************************************
changed: [database1]

TASK [mysql : Create mysql user] ***********************************************************************
changed: [database1]

PLAY RECAP *********************************************************************************************
database1                  : ok=4    changed=2    unreachable=0    failed=0
webserver1                 : ok=3    changed=0    unreachable=0    failed=0
webserver2                 : ok=3    changed=0    unreachable=0    failed=0
```

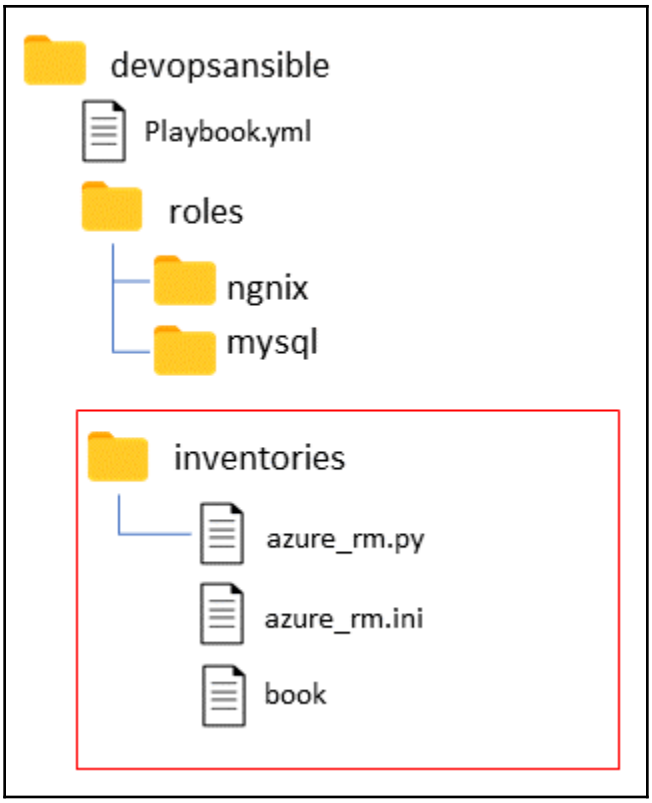
```
[redacted]/devopsansible# ansible-vault encrypt group_vars/database/main.yml
New Vault password:
Confirm New Vault password:
Encryption successful
```

```
$ANSIBLE_VAULT;1.1;AES256
62313136303363623235343530313139393962326464616661373133633532363138323237363730643534653532666533363832316606134653265343434663963306634343838613338393038303866393433663332323465333663303364373531 0a626134313164323933363139323437373730316135633163303562383162646266665343038313836343139346632663031373335633630373039376666665663538363936656338366339643261363033626263303233626330323063363136653962
```

```
/devopsansible# ansible-playbook -i inventory playbook.yml --ask-vault-pass
Vault password:
```




```
#
# Configuration file for azure_rm.py
#
[azure]
# Control which resource groups are included. By default all resources groups are included.
# Set resource_groups to a comma separated list of resource groups names.
#resource_groups=

# Control which tags are included. Set tags to a comma separated list of keys or key:value pairs
#tags=

# Include powerstate. If you don't need powerstate information, turning it off improves runtime performance.
include_powerstate=no

# Control grouping with the following boolean flags. Valid values: yes, no, true, false, True, False, 0, 1.
group_by_resource_group=no
group_by_location=no
group_by_security_group=no
group_by_tag=yes
use_private_ip=no       Mikael KRIEF, 20 hours ago • add dynamique inventory
```


devopsansible
Playbook.yml
roles
ngnix
mysql
inventories
azure_rm.py
azure_rm.ini
book

```
[redacted]/devopsansible# ansible-inventory -i inventories/azure_rm.py --list
[redacted]

{
    "_meta": {
        "hostvars": {
            "VM01": {
                "ansible_host": "137.117.215.130",
                "computer_name": "VM01",
                "fqdn": null,
                "id": "/subscriptions/1da42ac9-ee3e-4[redacted]/resourceGroups/DEMOANSIBLE/providers/Microsoft
                "image": {
                    "offer": "UbuntuServer",
                    "publisher": "Canonical",
                    "sku": "18.04-LTS",
                    "version": "latest"
                },
                "location": "westeurope",
                "mac_address": "00-0D-3A-39-73-B0",
                "name": "VM01",
                "network_interface": "VM01VMNic",
                "network_interface_id": "/subscriptions/1da42a[redacted]/resourceGroups/demoAnsible/provide
rfaces/VM01VMNic",
                "os_disk": {
                    "name": "VM01_disk1_5dcc564907a1494ba78c587a3e836723",
                    "operating_system_type": "linux"
                },
                "plan": null,
                "private_ip": "10.0.0.4",
                "private_ip_alloc_method": "Dynamic",
                "provisioning_state": "Succeeded",
                "public_ip": "137.117.215.130",
                "public_ip_alloc_method": "Dynamic",
                "public_ip_id": "/subscriptions/1da42ac9-ee3[redacted]/resourceGroups/demoAnsible/providers
M01PublicIP",
                "public_ip_name": "VM01PublicIP",
```

```
[redacted]/devopsansible# ansible-inventory -i inventories/azure_rm.py --graph
[redacted]

@all:
  |--@azure:
  |  |--VM01
  |  |--VM02
  |  |--VM03
  |  |--VM04
  |--@linux:
  |  |--VM01
  |  |--VM02
  |  |--VM03
  |  |--VM04
  |--@role:
  |  |--VM01
  |  |--VM02
  |  |--VM04
  |--@role_database:
  |  |--VM04
  |--@role_webserver:
  |  |--VM01
  |  |--VM02
  |--@ungrouped:
```

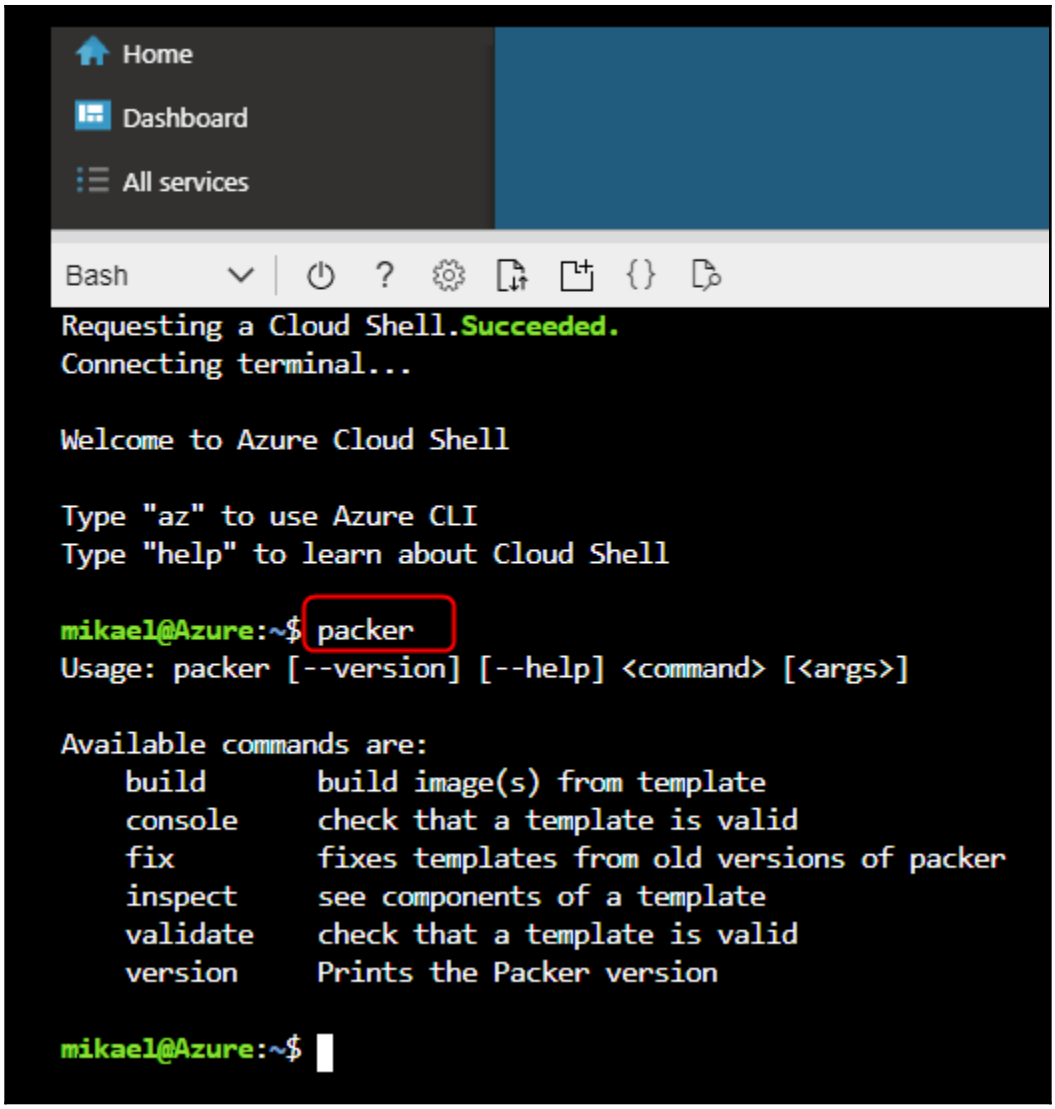
```
[redacted]/devopsansible# ansible-playbook -i inventories/  playbook.yml --check --vault-password-file ~/.vault_pass.txt

PLAY [webserver] ***************************************************************************************************************

TASK [Gathering Facts] *********************************************************************************************************
ok: [VM01]
ok: [VM02]

TASK [ngnix : install and check nginx latest version] **************************************************************************
ok: [VM02]
ok: [VM01]

TASK [ngnix : start nginx] *****************************************************************************************************
ok: [VM01]
ok: [VM02]

PLAY [database] ****************************************************************************************************************

TASK [Gathering Facts] *********************************************************************************************************
ok: [VM04]

TASK [mysql : Update apt cache] ************************************************************************************************
changed: [VM04]

TASK [mysql : Install required software] ***************************************************************************************
ok: [VM04]

TASK [mysql : Create mysql user] ***********************************************************************************************
ok: [VM04]

PLAY RECAP *********************************************************************************************************************
VM01                       : ok=3    changed=0    unreachable=0    failed=0
VM02                       : ok=3    changed=0    unreachable=0    failed=0
VM04                       : ok=4    changed=1    unreachable=0    failed=0
```

```
[redacted]/devopsansible# ansible-playbook -i inventories/  playbook.yml  --vault-password-file ~/.vault_pass.txt

PLAY [webserver] ***************************************************************************************************************

TASK [Gathering Facts] *********************************************************************************************************
ok: [VM01]
ok: [VM02]

TASK [ngnix : install and check nginx latest version] **************************************************************************
ok: [VM02]
ok: [VM01]

TASK [ngnix : start nginx] *****************************************************************************************************
ok: [VM01]
ok: [VM02]

PLAY [database] ****************************************************************************************************************

TASK [Gathering Facts] *********************************************************************************************************
ok: [VM04]

TASK [mysql : Update apt cache] ************************************************************************************************
ok: [VM04]

TASK [mysql : Install required software] ***************************************************************************************
ok: [VM04]

TASK [mysql : Create mysql user] ***********************************************************************************************
ok: [VM04]

PLAY RECAP *********************************************************************************************************************
VM01                       : ok=3    changed=0    unreachable=0    failed=0
VM02                       : ok=3    changed=0    unreachable=0    failed=0
VM04                       : ok=4    changed=0    unreachable=0    failed=0
```

Chapter 4: Optimizing Infrastructure Deployment with Packer

```
                                   /CHAP04# sh install_packer.sh
                                     Speed   Time    Time     Time  Current
                                    Dload  Upload   Total   Spent    Left  Speed
100  1696  100  1696    0     0   3981      0 --:--:-- --:--:-- --:--:--  3971
gpg: key 51852D87348FFC4C: "HashiCorp Security <security@hashicorp.com>" not changed
gpg: Total number processed: 1
gpg:              unchanged: 1
gpg: Signature made Thu Apr 11 20:30:03 2019 DST
gpg:                using RSA key 91A6E7F85D05C65630BEF18951852D87348FFC4C
gpg: Good signature from "HashiCorp Security <security@hashicorp.com>" [unknown]
gpg: WARNING: This key is not certified with a trusted signature!
gpg:          There is no indication that the signature belongs to the owner.
Primary key fingerprint: 91A6 E7F8 5D05 C656 30BE  F189 5185 2D87 348F FC4C
packer_1.4.0_linux_amd64.zip: OK
Archive:  packer_1.4.0_linux_amd64.zip
  inflating: /usr/local/bin/packer
```

```
PS C:\Windows\system32> choco install packer -y
Chocolatey v0.10.11
Installing the following packages:
packer
By installing you accept licenses for the packages.
Progress: Downloading packer 1.4.0... 100%

packer v1.4.0 [Approved]
packer package files install completed. Performing other installation steps.
Removing old packer plugins
Downloading packer 64 bit
  from 'https://releases.hashicorp.com/packer/1.4.0/packer_1.4.0_windows_amd64.zip'
Progress: 100% - Completed download of C:\Users\MikaelKRIEF\AppData\Local\Temp\chocolatey\packer\1.4.0\packer_1.4.0_wind
ows_amd64.zip (33.61 MB).
Download of packer_1.4.0_windows_amd64.zip (33.61 MB) completed.
Hashes match.
Extracting C:\Users\MikaelKRIEF\AppData\Local\Temp\chocolatey\packer\1.4.0\packer_1.4.0_windows_amd64.zip to C:\ProgramD
ata\chocolatey\lib\packer\tools...
C:\ProgramData\chocolatey\lib\packer\tools
 ShimGen has successfully created a shim for packer.exe
 The install of packer was successful.
  Software installed to 'C:\ProgramData\chocolatey\lib\packer\tools'

Chocolatey installed 1/1 packages.
 See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).
PS C:\Windows\system32>
```


Home
Dashboard
All services
Bash
Requesting a Cloud Shell.Succeeded.
Connecting terminal...
Welcome to Azure Cloud Shell
Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell
mikael@Azure:~$ packer
Usage: packer [--version] [--help] <command> [<args>]
Available commands are:
build build image(s) from template
console check that a template is valid
fix fixes templates from old versions of packer
inspect see components of a template
validate check that a template is valid
version Prints the Packer version
mikael@Azure:~$

:~$ packer --version
1.4.2

```
[redacted]# packer --help
Usage: packer [--version] [--help] <command> [<args>]

Available commands are:
    build       build image(s) from template
    fix         fixes templates from old versions of packer
    inspect     see components of a template
    validate    check that a template is valid
    version     Prints the Packer version
```

```
"variables": {
    "client_id": "{{env `ARM_CLIENT_ID`}}",
    "client_secret": "{{env `ARM_CLIENT_SECRET`}}",
    "subscription_id": "{{env `ARM_SUBSCRIPTION_ID`}}",
    "tenant_id": "{{env `ARM_TENANT_ID`}}",
    "resource_group": "rg_images",
    "image_name": "linuxWeb",
    "image_version": "0.0.1",
    "location": "West Europe",
    "vm_size": "Standard_DS2_v2"
},
```

```
[redacted]/templates# packer validate azure_linux.json
Template validated successfully.
```

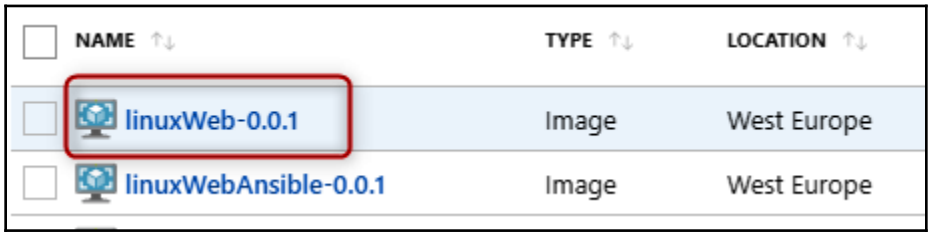
```
                              /CHAP04/templates# packer build azure_linux.json
azure-arm output will be in this color.

==> azure-arm: Running builder ...
==> azure-arm: Getting tokens using client secret
    azure-arm: Creating Azure Resource Manager (ARM) client ...
==> azure-arm: WARNING: Zone resiliency may not be supported in West Europe, checkout the docs at https:/
==> azure-arm: Creating resource group ...
==> azure-arm:  -> ResourceGroupName : 'packer-Resource-Group-xwzj9da4y4'
==> azure-arm:  -> Location          : 'West Europe'
==> azure-arm:  -> Tags              :
==> azure-arm:  ->> version : 0.0.1
==> azure-arm:  ->> role : WebServer
==> azure-arm: Validating deployment template ...
==> azure-arm:  -> ResourceGroupName : 'packer-Resource-Group-xwzj9da4y4'
==> azure-arm:  -> DeploymentName    : 'pkrdpxwzj9da4y4'
==> azure-arm: Deploying deployment template ...
==> azure-arm:  -> ResourceGroupName : 'packer-Resource-Group-xwzj9da4y4'
==> azure-arm:  -> DeploymentName    : 'pkrdpxwzj9da4y4'
```

```
==> azure-arm: Querying the machine's properties ...
==> azure-arm:  -> ResourceGroupName : 'packer-Resource-Group-uht810tdrw'
==> azure-arm:  -> ComputeName       : 'pkrvmuht810tdrw'
==> azure-arm:  -> Managed OS Disk   : '/subscriptions/8a7aace5-[redacted]/resourceGroups/packer-Resource-Group-uht810tdrw/providers/Microsoft
.Compute/disks/pkrosuht810tdrw'
==> azure-arm: Querying the machine's additional disks properties ...
==> azure-arm:  -> ResourceGroupName : 'packer-Resource-Group-uht810tdrw'
==> azure-arm:  -> ComputeName       : 'pkrvmuht810tdrw'
==> azure-arm: Powering off machine ...
==> azure-arm:  -> ResourceGroupName : 'packer-Resource-Group-uht810tdrw'
==> azure-arm:  -> ComputeName       : 'pkrvmuht810tdrw'
==> azure-arm: Capturing image ...
==> azure-arm:  -> Compute ResourceGroupName : 'packer-Resource-Group-uht810tdrw'
==> azure-arm:  -> Compute Name              : 'pkrvmuht810tdrw'
==> azure-arm:  -> Compute Location          : 'West Europe'
==> azure-arm:  -> Image ResourceGroupName   : 'rg_images'
==> azure-arm:  -> Image Name                : 'linuxWeb-0.0.2'
==> azure-arm:  -> Image Location            : 'westeurope'
==> azure-arm: Deleting resource group ...
==> azure-arm:  -> ResourceGroupName : 'packer-Resource-Group-uht810tdrw'
==> azure-arm:
==> azure-arm: The resource group was created by Packer, deleting ...
==> azure-arm: Deleting the temporary OS disk ...
==> azure-arm:  -> OS Disk : skipping, managed disk was used...
==> azure-arm: Deleting the temporary Additional disk ...
==> azure-arm:  -> Additional Disk : skipping, managed disk was used...
Build 'azure-arm' finished.

==> Builds finished. The artifacts of successful builds are:
--> azure-arm: Azure.ResourceManagement.VMImage:

OSType: Linux
ManagedImageResourceGroupName: rg_images
ManagedImageName: linuxWeb-0.0.2
ManagedImageId: /subscriptions/8a7aace5-[redacted]/resourceGroups/rg_images/providers/Microsoft.Compute/images/linuxWeb-0.0.2
ManagedImageLocation: westeurope
```

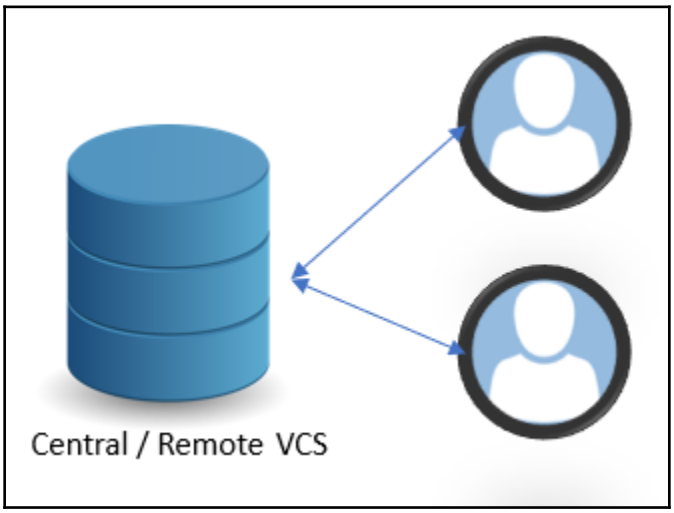
1

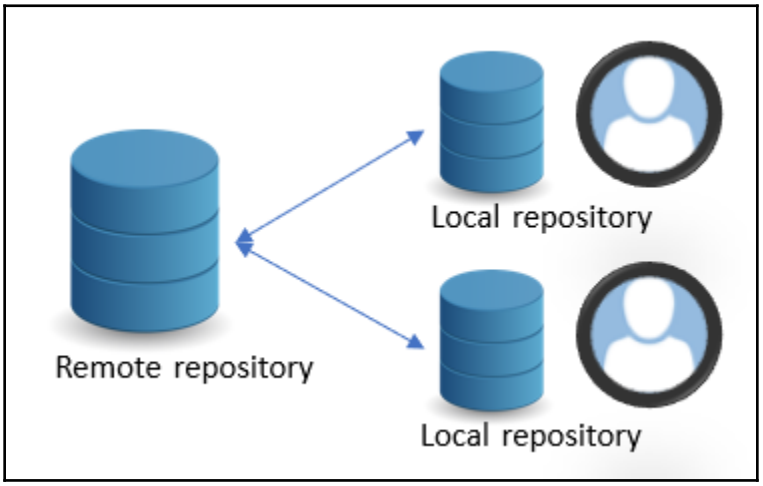
2

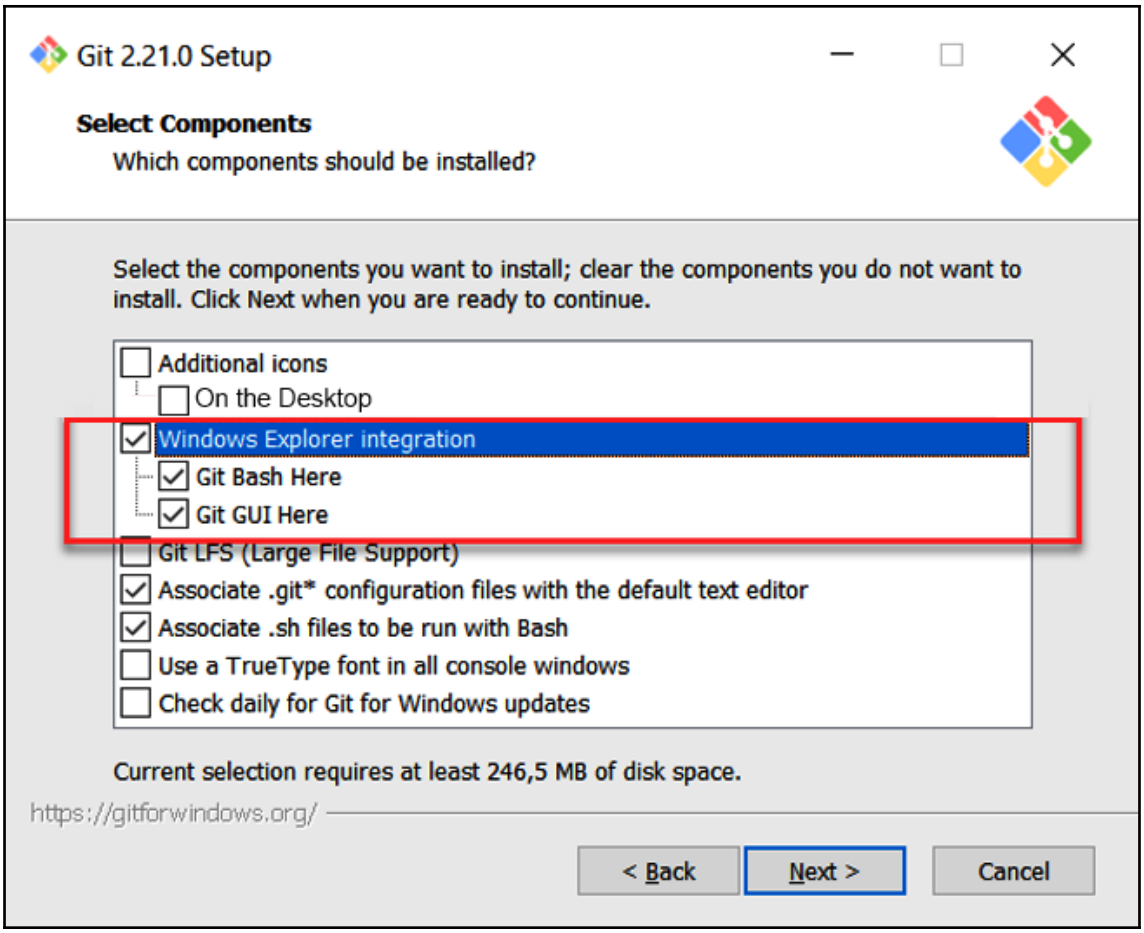
3

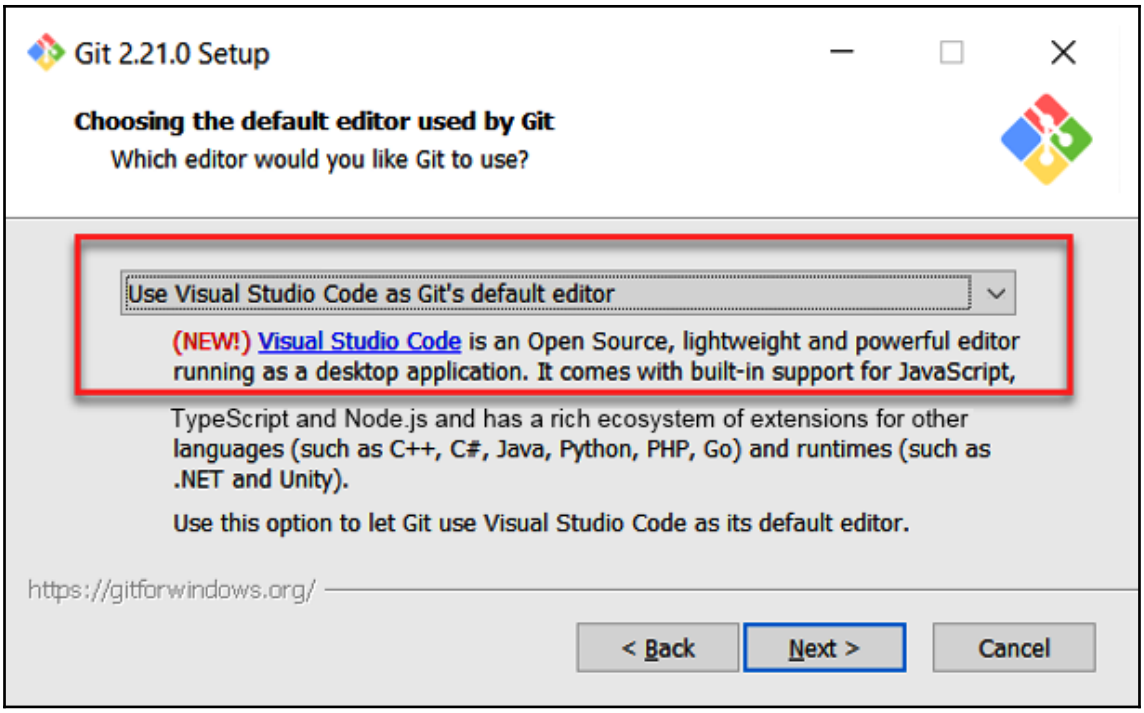


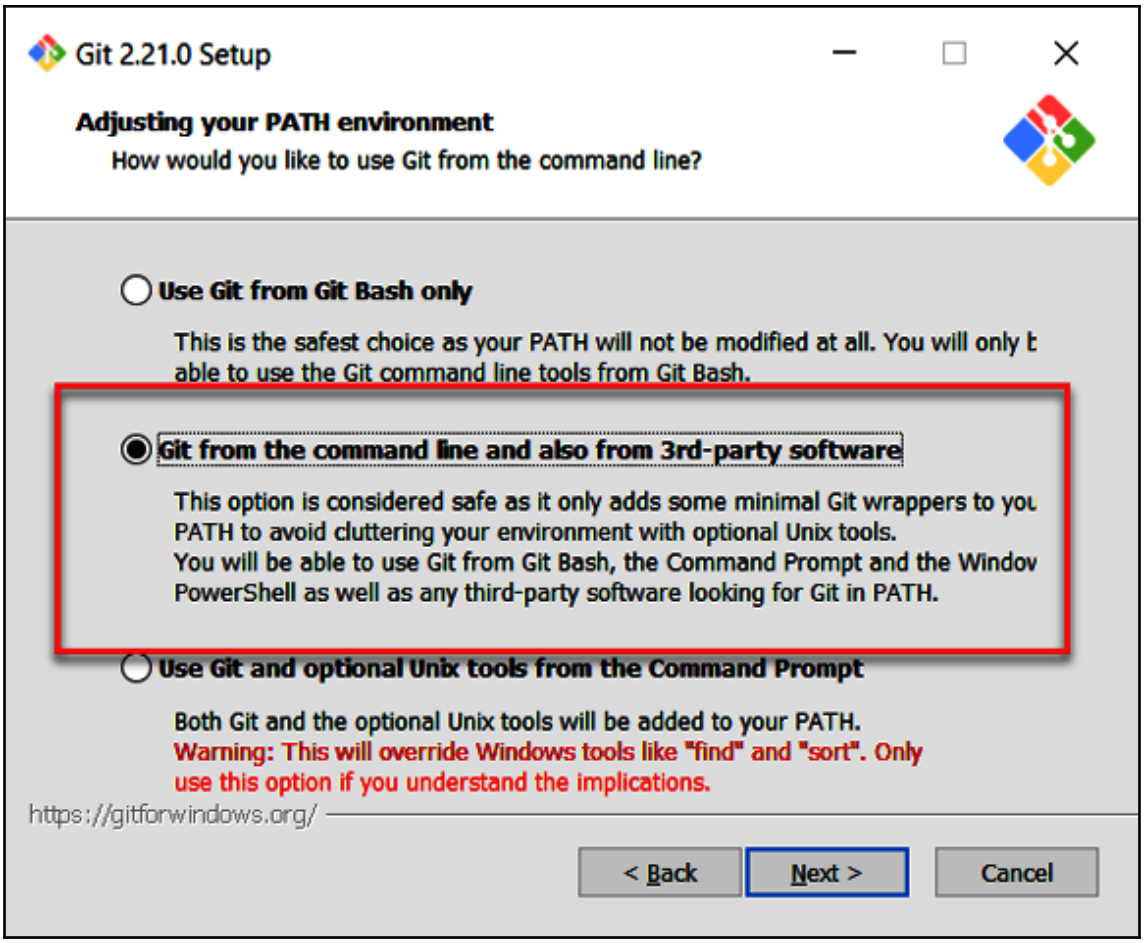
Chapter 5: Managing Your Source Code with Git

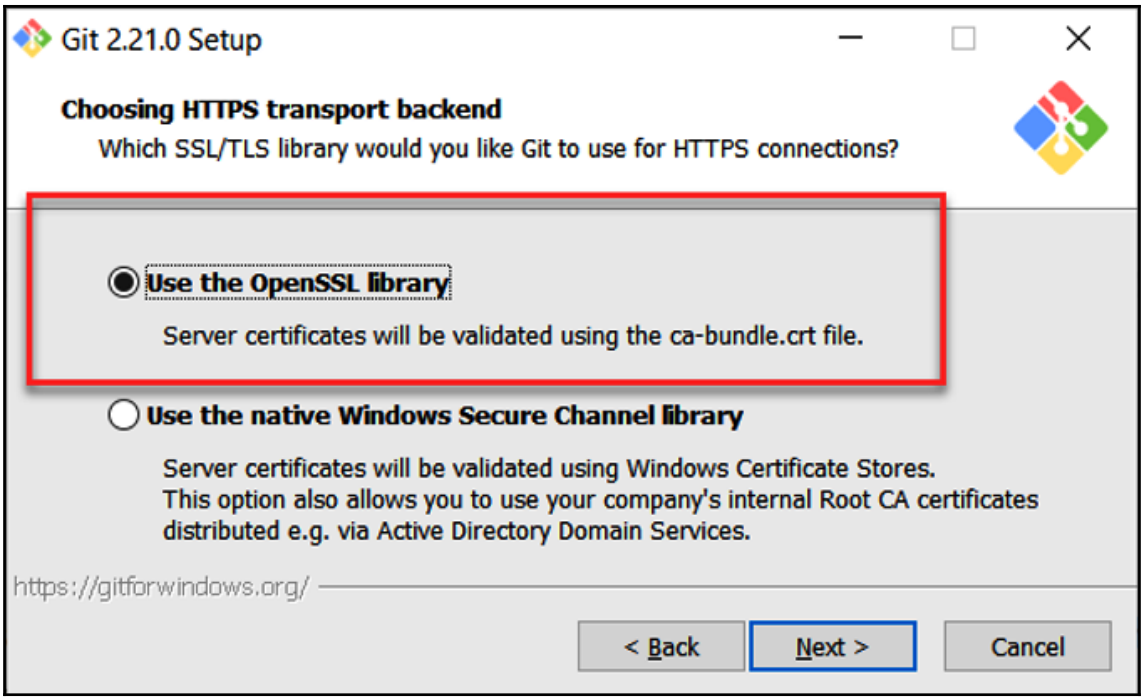


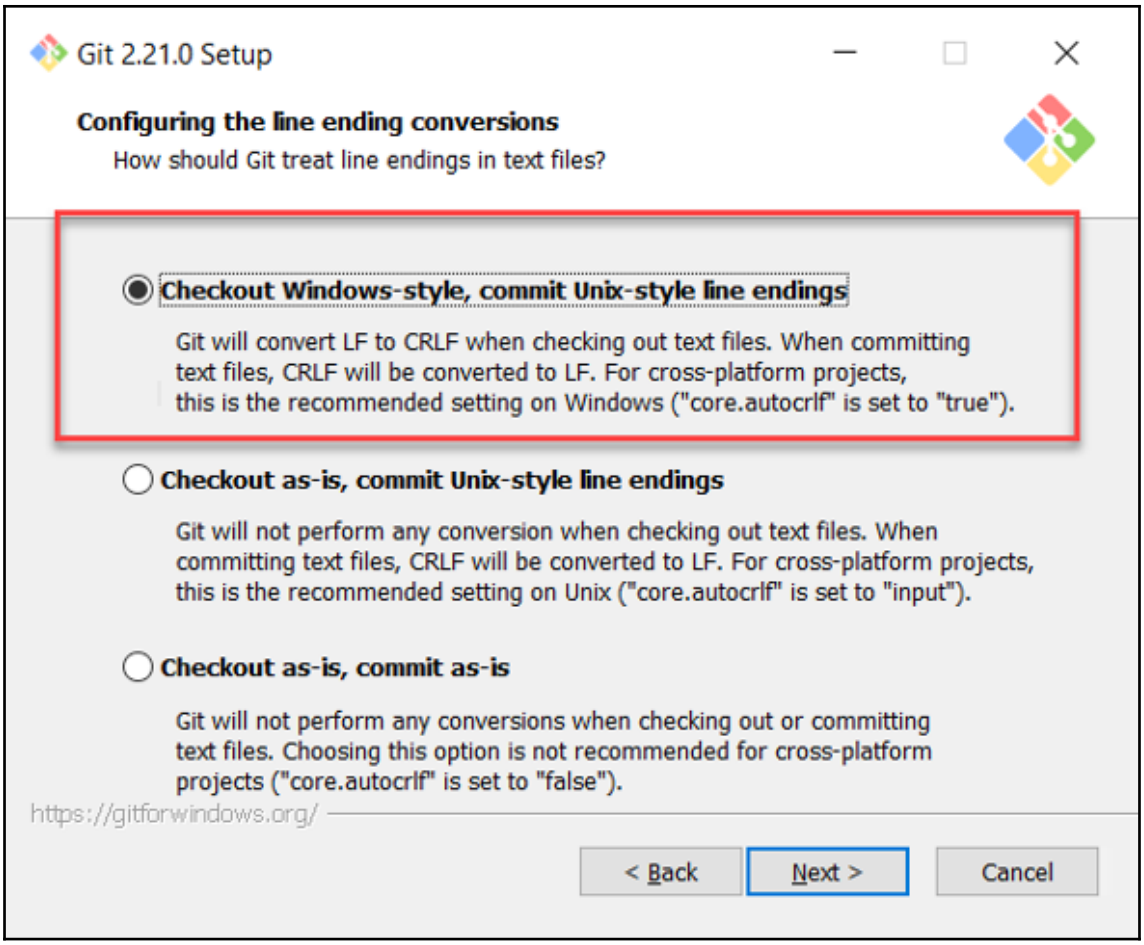


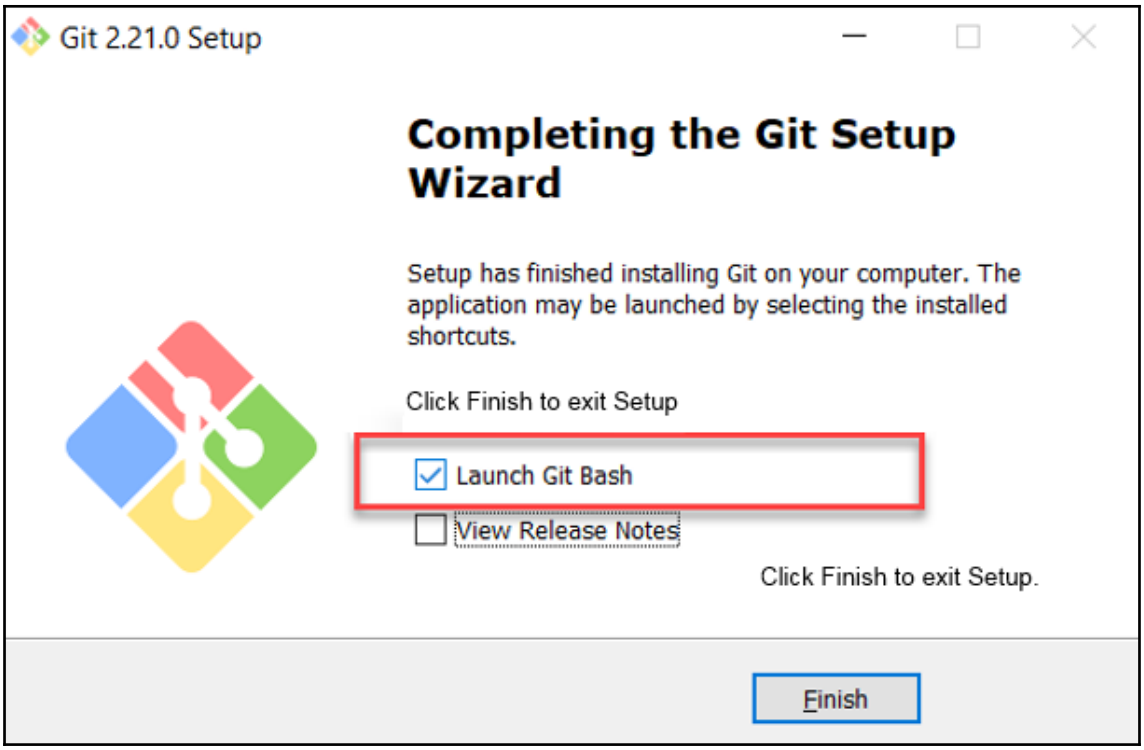

Git 2.21.0 Setup
Select Components
Which components should be installed?
Select the components you want to install; clear the components you do not want to install. Click Next when you are ready to continue.
Additional icons
On the Desktop
Windows Explorer integration
Git Bash Here
Git GUI Here
Git LFS (Large File Support)
Associate .git* configuration files with the default text editor
Associate .sh files to be run with Bash
Use a TrueType font in all console windows
Check daily for Git for Windows updates
Current selection requires at least 246,5 MB of disk space.
https://gitforwindows.org/
< Back
Next >
Cancel

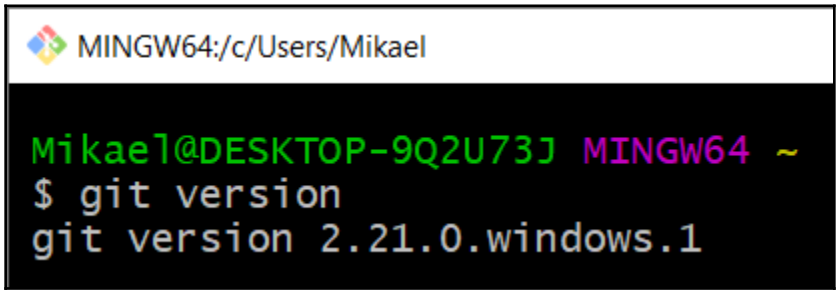

Git 2.21.0 Setup
Choosing the default editor used by Git
Which editor would you like Git to use?
Use Visual Studio Code as Git's default editor
(NEW!) Visual Studio Code is an Open Source, lightweight and powerful editor running as a desktop application. It comes with built-in support for JavaScript,
TypeScript and Node.js and has a rich ecosystem of extensions for other languages (such as C++, C#, Java, Python, PHP, Go) and runtimes (such as .NET and Unity).
Use this option to let Git use Visual Studio Code as its default editor.
https://gitforwindows.org/
< Back
Next >
Cancel


Git 2.21.0 Setup
Adjusting your PATH environment
How would you like to use Git from the command line?
Use Git from Git Bash only
This is the safest choice as your PATH will not be modified at all. You will only b
able to use the Git command line tools from Git Bash.
Git from the command line and also from 3rd-party software
This option is considered safe as it only adds some minimal Git wrappers to you
PATH to avoid cluttering your environment with optional Unix tools.
You will be able to use Git from Git Bash, the Command Prompt and the Windov
PowerShell as well as any third-party software looking for Git in PATH.
Use Git and optional Unix tools from the Command Prompt
Both Git and the optional Unix tools will be added to your PATH.
Warning: This will override Windows tools like "find" and "sort". Only
use this option if you understand the implications.
https://gitforwindows.org/
< Back
Next >
Cancel


Git 2.21.0 Setup
Choosing HTTPS transport backend
Which SSL/TLS library would you like Git to use for HTTPS connections?
Use the OpenSSL library
Server certificates will be validated using the ca-bundle.crt file.
Use the native Windows Secure Channel library
Server certificates will be validated using Windows Certificate Stores.
This option also allows you to use your company's internal Root CA certificates
distributed e.g. via Active Directory Domain Services.
https://gitforwindows.org/
< Back
Next >
Cancel

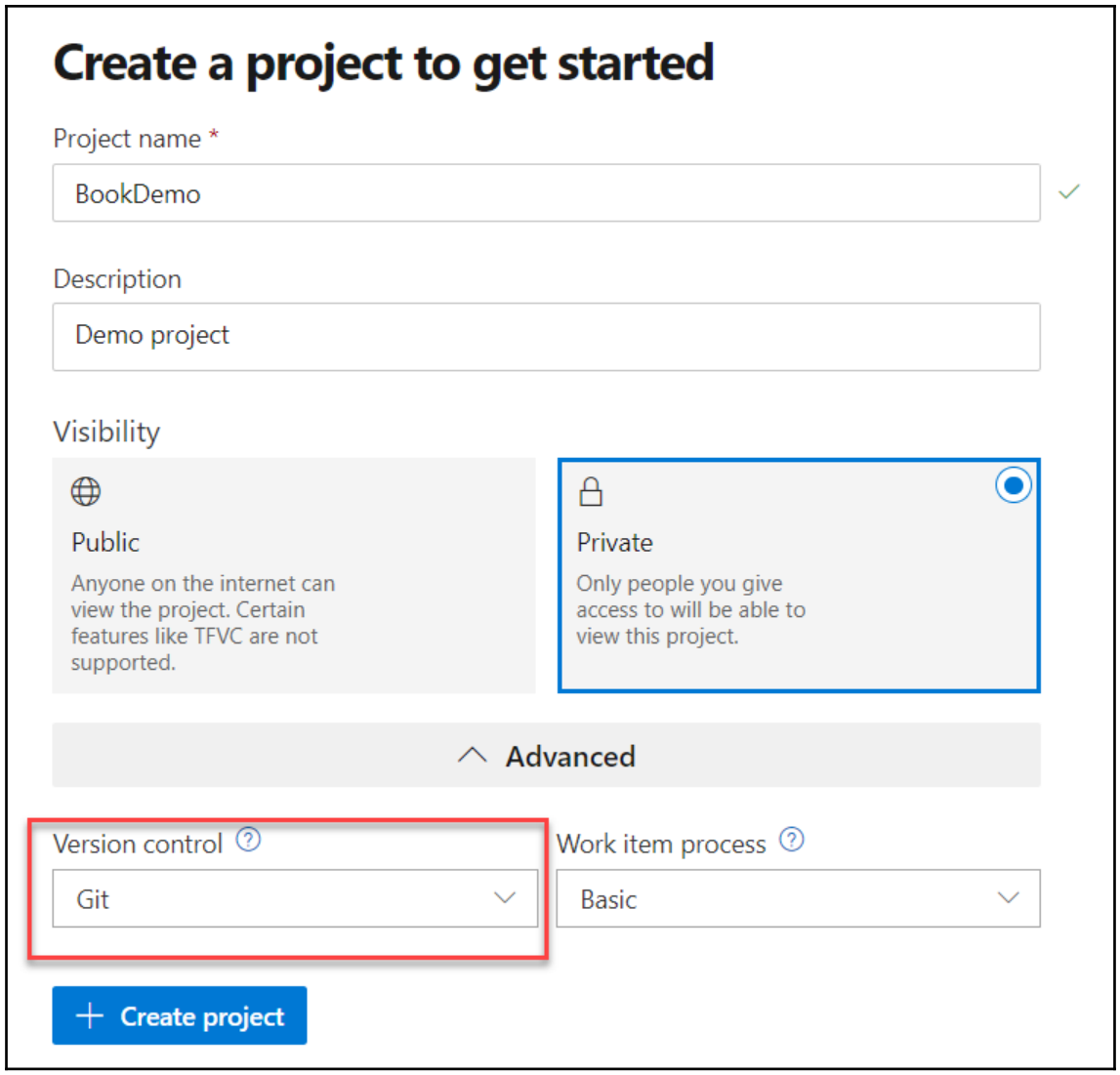

Git 2.21.0 Setup
Configuring the line ending conversions
How should Git treat line endings in text files?
Checkout Windows-style, commit Unix-style line endings
Git will convert LF to CRLF when checking out text files. When committing text files, CRLF will be converted to LF. For cross-platform projects, this is the recommended setting on Windows ("core.autocrlf" is set to "true").
Checkout as-is, commit Unix-style line endings
Git will not perform any conversion when checking out text files. When committing text files, CRLF will be converted to LF. For cross-platform projects, this is the recommended setting on Unix ("core.autocrlf" is set to "input").
Checkout as-is, commit as-is
Git will not perform any conversions when checking out or committing text files. Choosing this option is not recommended for cross-platform projects ("core.autocrlf" is set to "false").
https://gitforwindows.org/
< Back
Next >
Cancel

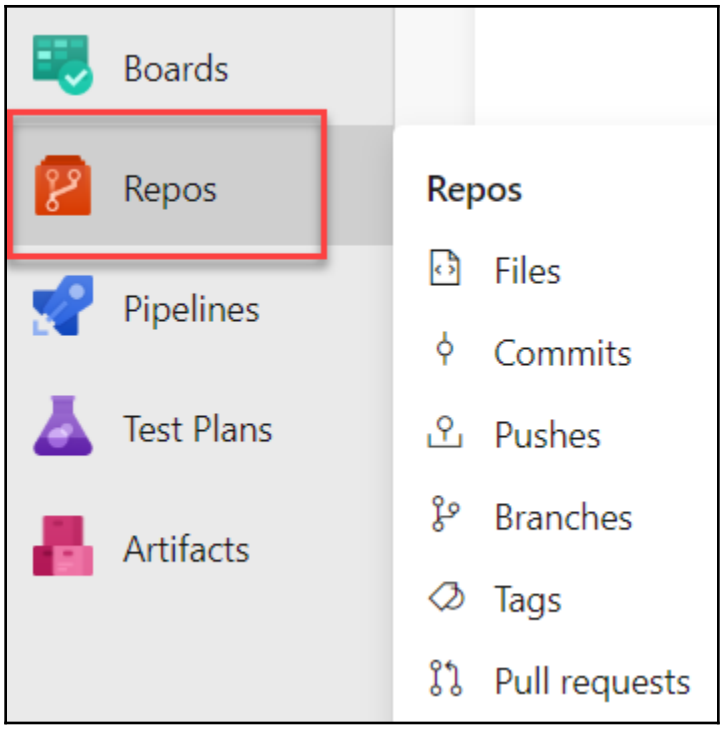

Git 2.21.0 Setup
Completing the Git Setup Wizard
Setup has finished installing Git on your computer. The application may be launched by selecting the installed shortcuts.
Click Finish to exit Setup
Launch Git Bash
View Release Notes
Click Finish to exit Setup.
Finish

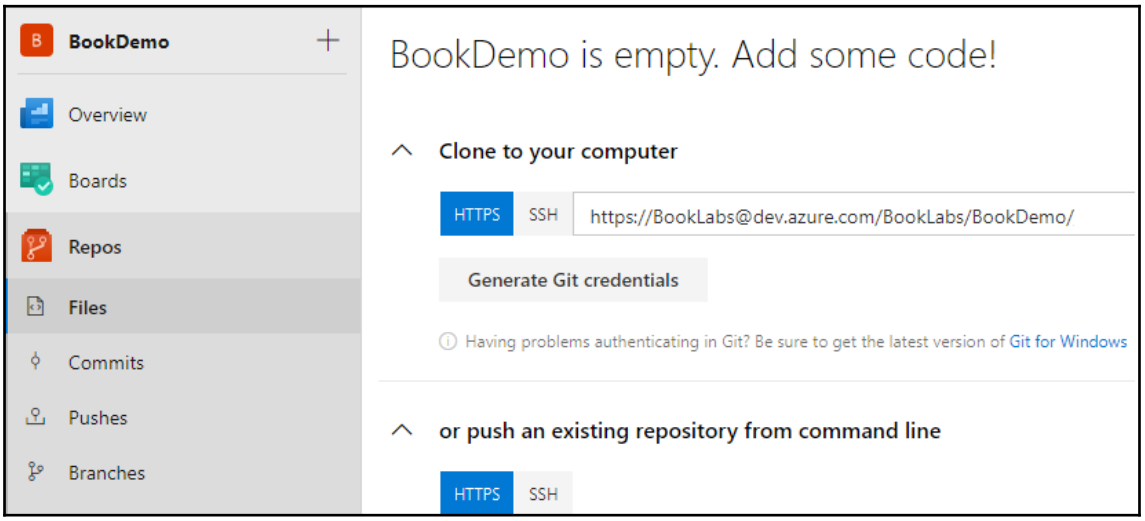

MINGW64:/c/Users/Mikael
Mikael@DESKTOP-9Q2U73J MINGW64 ~
$ git version
git version 2.21.0.windows.1

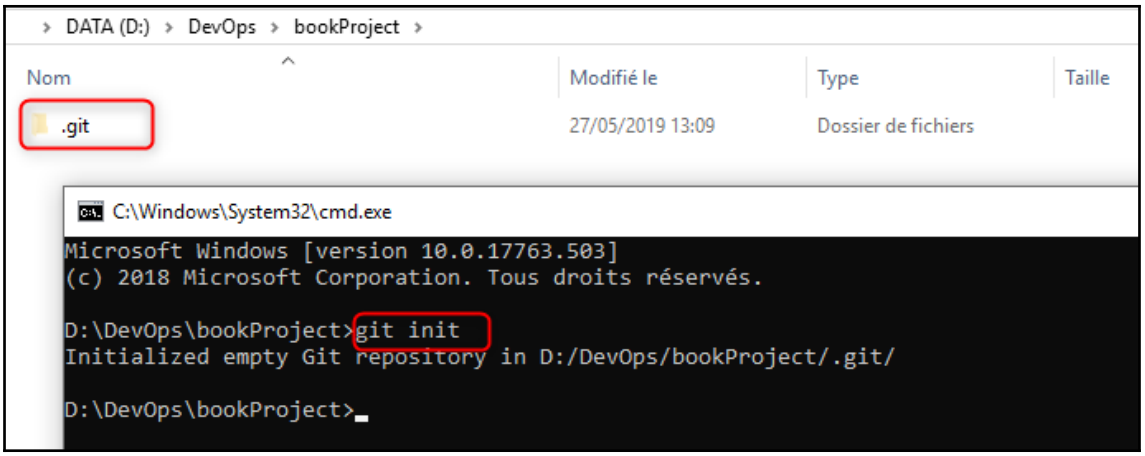
```
PS C:\Windows\system32> choco install -y git
Chocolatey v0.10.11
Installing the following packages:
git
By installing you accept licenses for the packages.
Progress: Downloading git.install 2.21.0... 100%
Progress: Downloading git 2.21.0... 100%

git.install v2.21.0 [Approved]
git.install package files install completed. Performing other installation steps.
Using Git LFS
Installing 64-bit git.install...
git.install has been installed.
git.install installed to 'C:\Users\MikaelKRIEF\AppData\Local\Programs\Git'
  git.install can be automatically uninstalled.
Environment Vars (like PATH) have changed. Close/reopen your shell to
 see the changes (or in powershell/cmd.exe just type `refreshenv`).
 The install of git.install was successful.
  Software installed to 'C:\Users\MikaelKRIEF\AppData\Local\Programs\Git\'

git v2.21.0 [Approved]
git package files install completed. Performing other installation steps.
 The install of git was successful.
  Software install location not explicitly set, could be in package or
  default install location if installer.

Chocolatey installed 2/2 packages.
 See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).
```

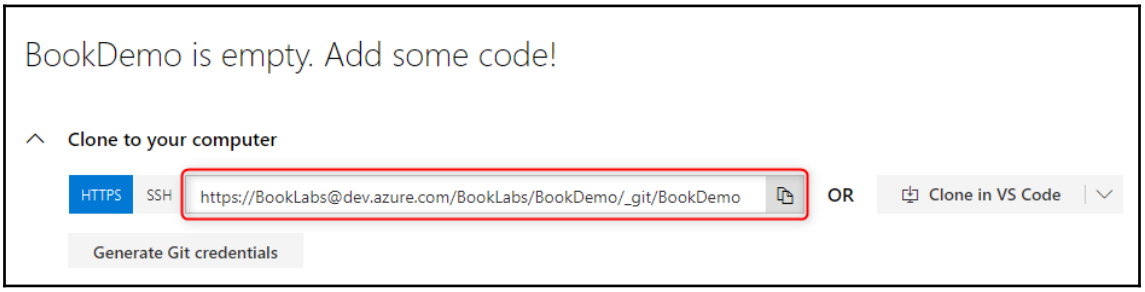
```
                            # git config --global user.name "mikaelkrief"
                            # git config --global user.email "mikael.krief
                            # git config --global --list
user.name=mikaelkrief
user.email=mikael.krief@          fr
```

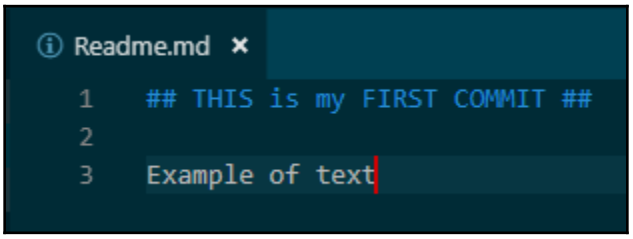

Create a project to get started
Project name *
BookDemo
Description
Demo project
Visibility
Public
Anyone on the internet can view the project. Certain features like TFVC are not supported.
Private
Only people you give access to will be able to view this project.
Advanced
Version control
Git
Work item process
Basic
Create project


Boards
Repos
Pipelines
Test Plans
Artifacts
Repos
Files
Commits
Pushes
Branches
Tags
Pull requests


BookDemo
Overview
Boards
Repos
Files
Commits
Pushes
Branches
BookDemo is empty. Add some code!
Clone to your computer
HTTPS
SSH
https://BookLabs@dev.azure.com/BookLabs/BookDemo/
Generate Git credentials
Having problems authenticating in Git? Be sure to get the latest version of Git for Windows
or push an existing repository from command line
HTTPS
SSH

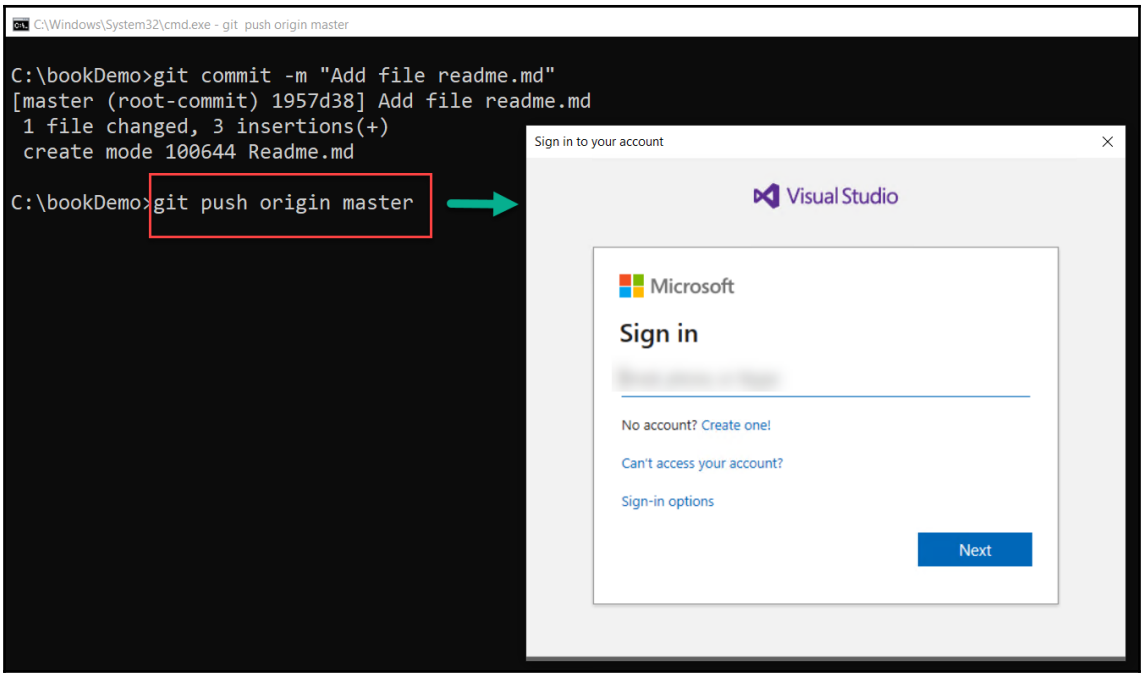

DATA (D:) › DevOps › bookProject ›
Nom
Modifié le
Type
Taille
.git
27/05/2019 13:09
Dossier de fichiers
C:\Windows\System32\cmd.exe
Microsoft Windows [version 10.0.17763.503]
(c) 2018 Microsoft Corporation. Tous droits réservés.
D:\DevOps\bookProject>git init
Initialized empty Git repository in D:/DevOps/bookProject/.git/
D:\DevOps\bookProject>


BookDemo is empty. Add some code!
Clone to your computer
HTTPS
SSH
https://BookLabs@dev.azure.com/BookLabs/BookDemo/_git/BookDemo
OR
Clone in VS Code
Generate Git credentials

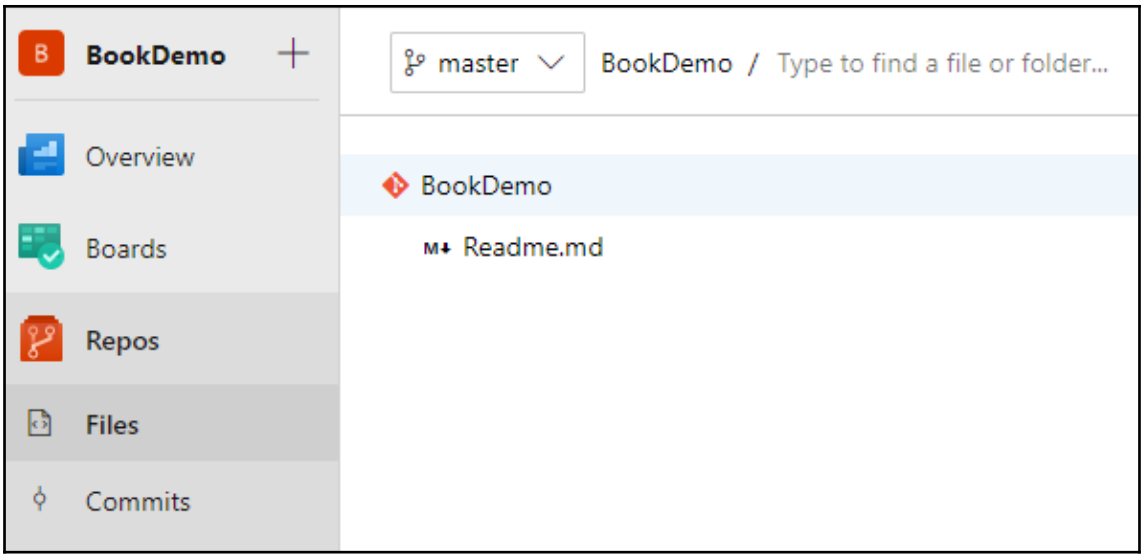

Readme.md
1 ## THIS is my FIRST COMMIT ##
2
3 Example of text

```
[redacted]\bookProject>git add .

[redacted]\bookProject>git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   Readme.md
```

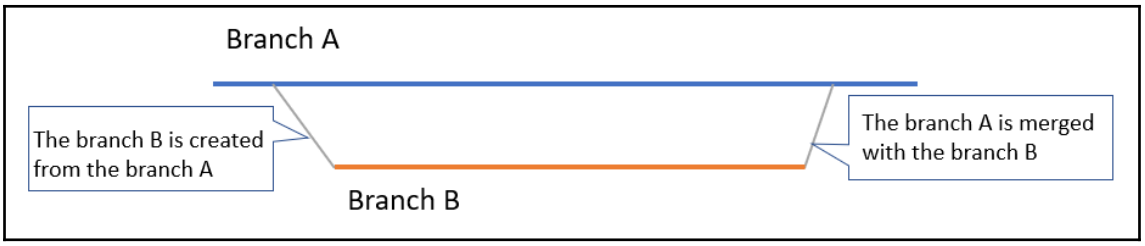
```
D:\DevOps\bookProject>git commit -m "Add file readme.md"
[master (root-commit) 0ffca3e] Add file readme.md
 Committer: Mikael KRIEF <mikael.krief@younited-credit.fr>
your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

 1 file changed, 3 insertions(+)
 create mode 100644 Readme.md
```




```
[redacted]\bookProject>git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 275 bytes | 275.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
remote: Analyzing objects... (3/3) (6 ms)
remote: Storing packfile... done (324 ms)
remote: Storing index... done (148 ms)
To https://dev.azure.com/BookLabs/BookDemo/_git/BookDemo
 * [new branch]      master -> master
```



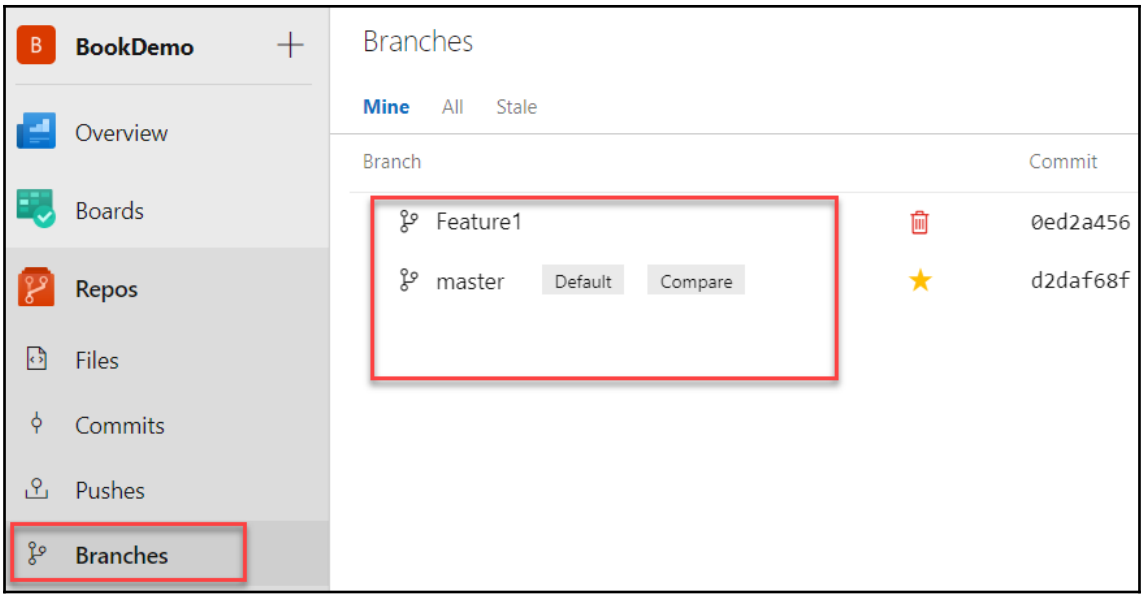

```
[redacted]\bookProject>git pull origin master
remote: Azure Repos
remote: Found 3 objects to send. (0 ms)
Unpacking objects: 100% (3/3), done.
From https://dev.azure.com/BookLabs/BookDemo/_git/BookDemo
 * branch            master     -> FETCH_HEAD
   9113a75..d2daf68  master     -> origin/master
Updating 9113a75..d2daf68
Fast-forward
 Readme.md | 4 +++-
 1 file changed, 3 insertions(+), 1 deletion(-)
```

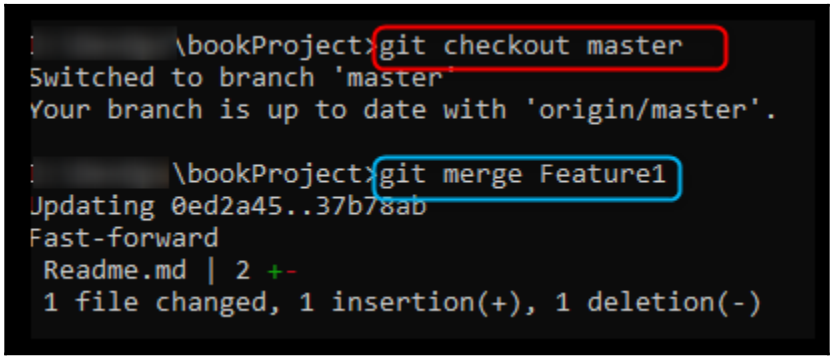


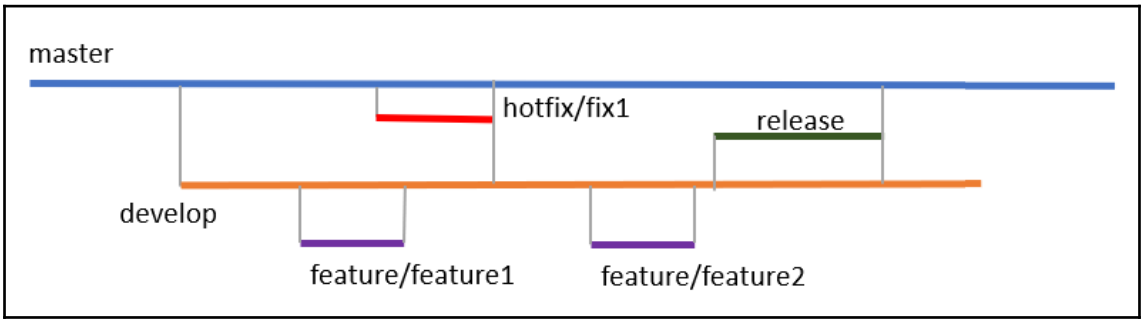
```
\BookDemo>git branch Feature1

\BookDemo>git checkout Feature1
Switched to branch 'Feature1'
```

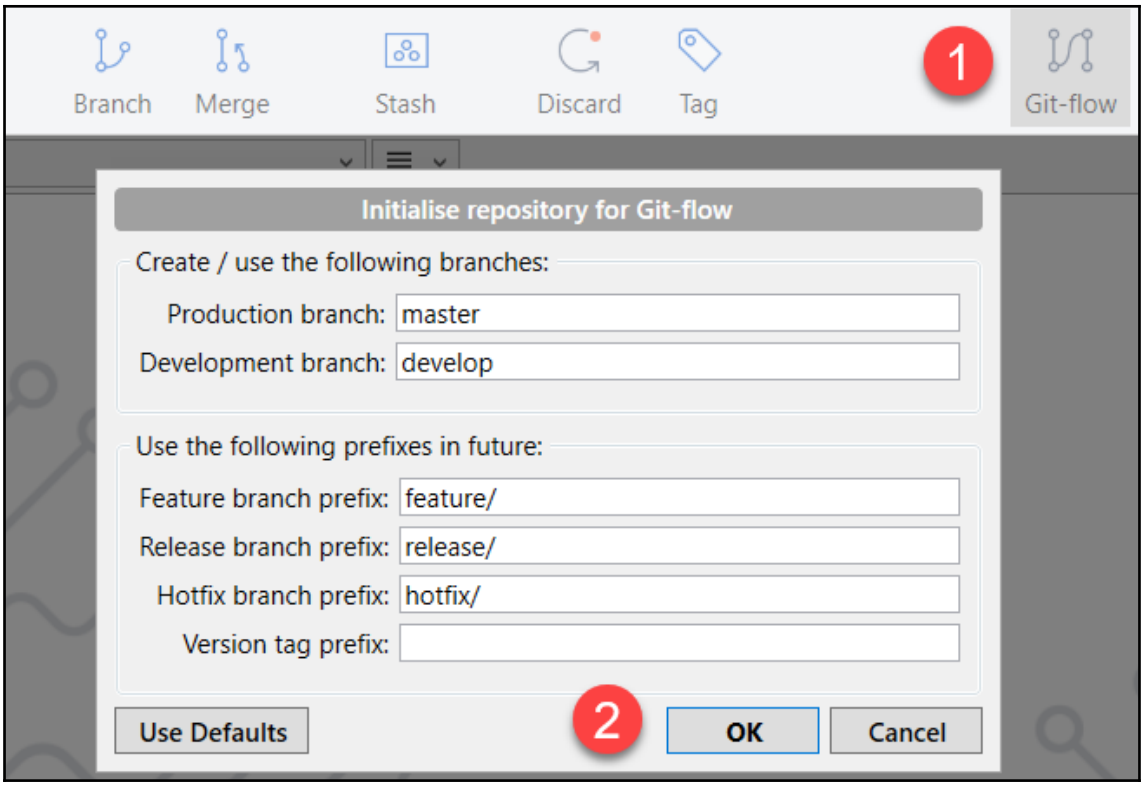
```
\BookDemo>git branch
* Feature1
  master
```

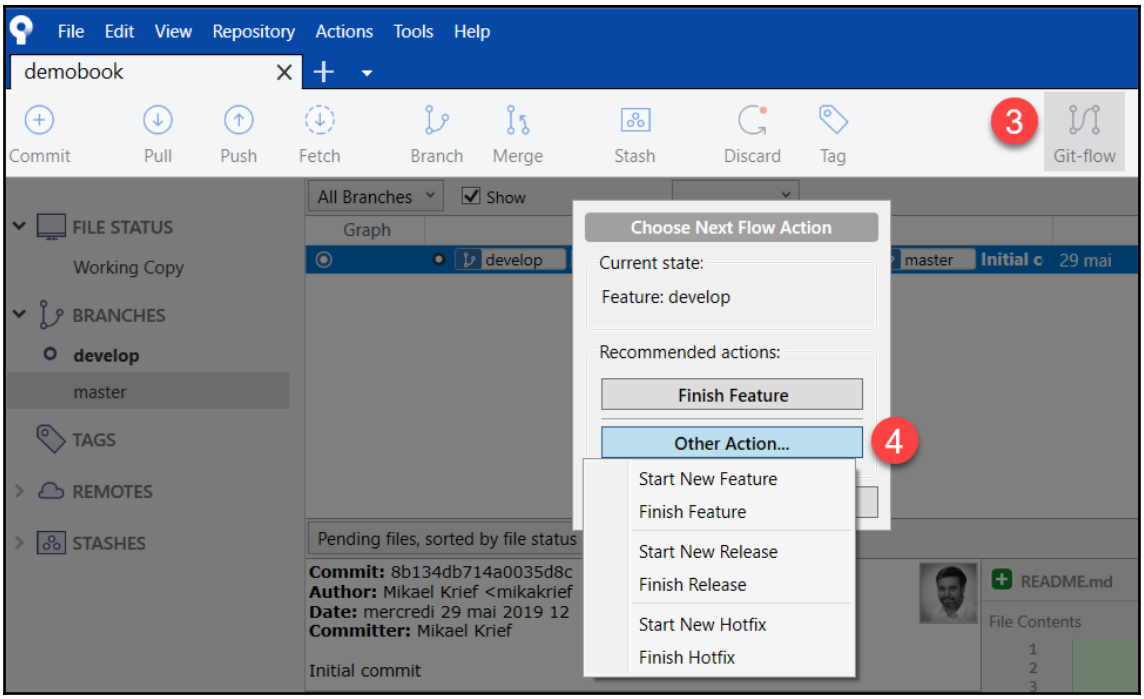
```
\BookDemo>git add .

\BookDemo>git commit -m "Add feature 1 code"
[Feature1 0ed2a45] Add feature 1 code
 1 file changed, 3 insertions(+), 1 deletion(-)

\BookDemo>git push origin Feature1
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 306 bytes | 153.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Analyzing objects... (3/3) (97 ms)
remote: Storing packfile... done (188 ms)
remote: Storing index... done (92 ms)
To https://dev.azure.com/BookLabs/BookDemo/_git/BookDemo
 * [new branch]      Feature1 -> Feature1
```


BookDemo
Overview
Boards
Repos
Files
Commits
Pushes
Branches
Branches
Mine
All
Stale
Branch
Commit
Feature1
0ed2a456
master
Default
Compare
d2daf68f

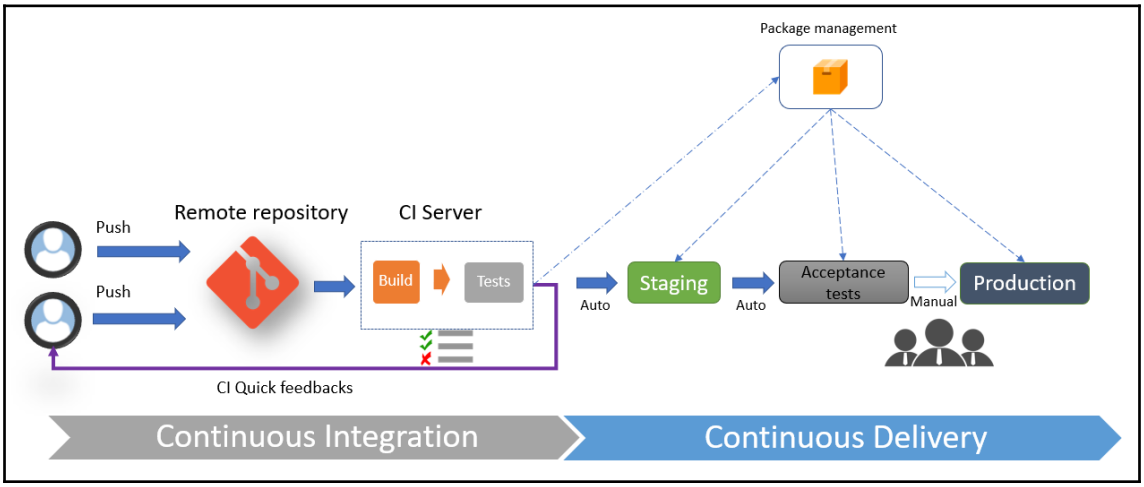

\bookProject>git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
\bookProject>git merge Feature1
Updating 0ed2a45..37b78ab
Fast-forward
Readme.md | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)

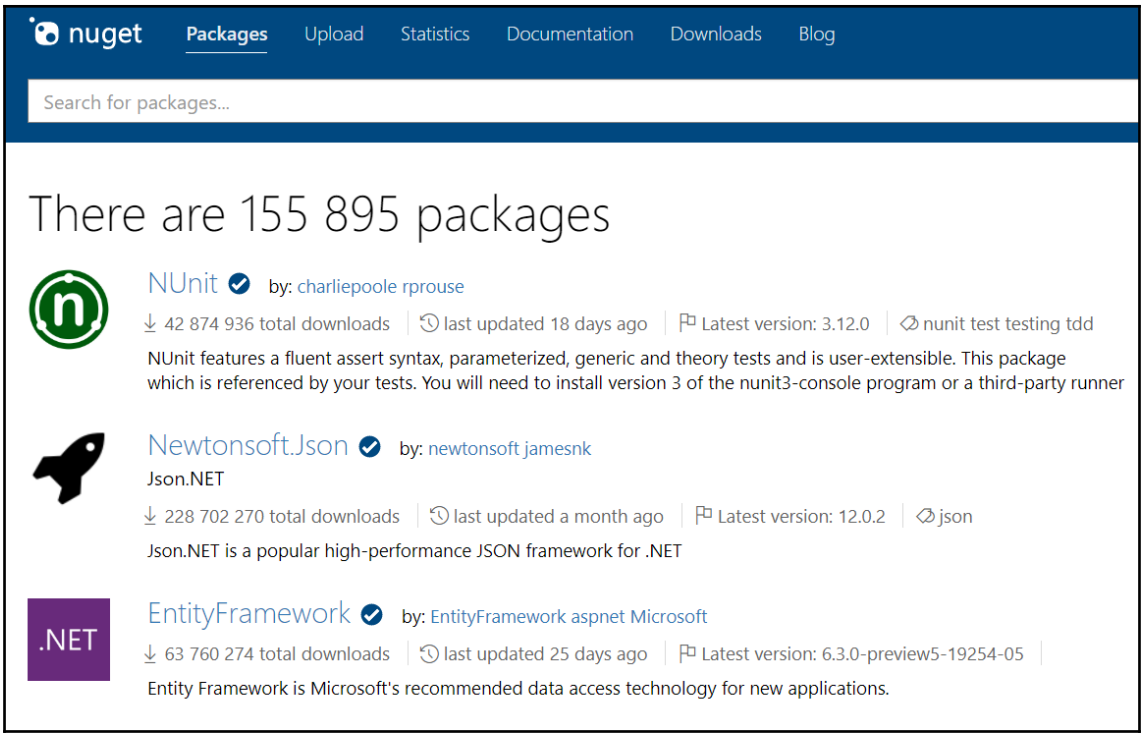

master
hotfix/fix1
release
develop
feature/feature1
feature/feature2

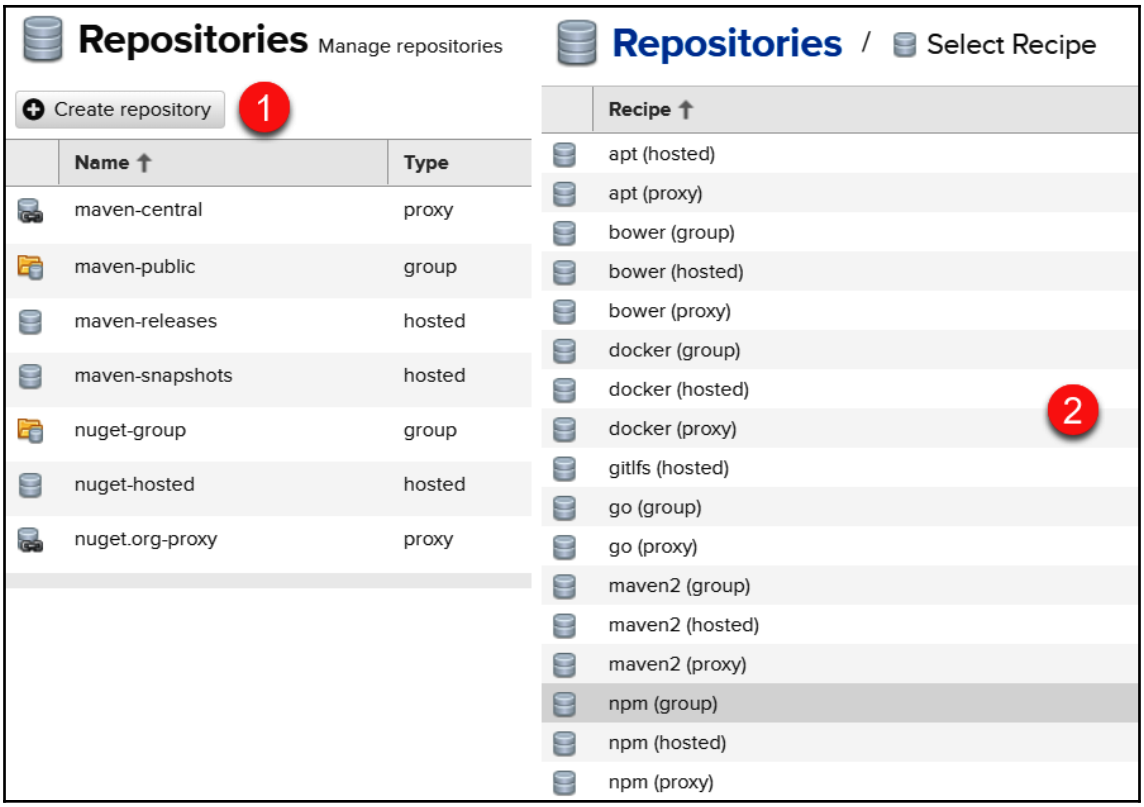

Branch
Merge
Stash
Discard
Tag
1
Git-flow
Initialise repository for Git-flow
Create / use the following branches:
Production branch: master
Development branch: develop
Use the following prefixes in future:
Feature branch prefix: feature/
Release branch prefix: release/
Hotfix branch prefix: hotfix/
Version tag prefix:
Use Defaults
2
OK
Cancel

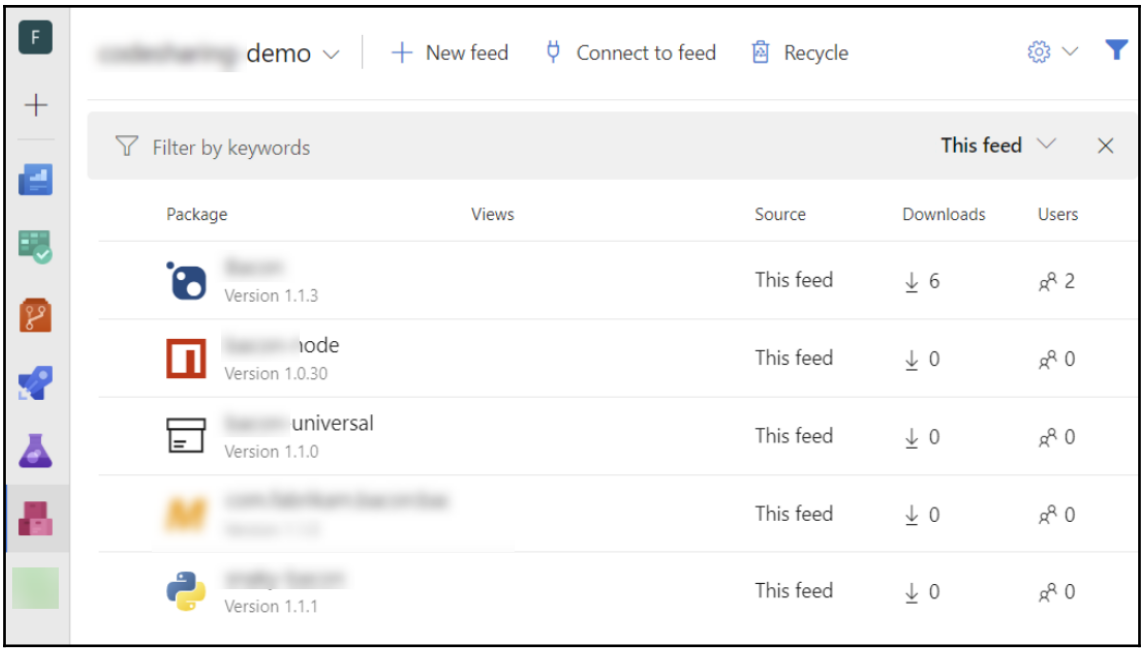

File Edit View Repository Actions Tools Help
demobook
Commit
Pull
Push
Fetch
Branch
Merge
Stash
Discard
Tag
3
Git-flow
FILE STATUS
Working Copy
BRANCHES
develop
master
TAGS
REMOTES
STASHES
All Branches
Show
Graph
develop
master
Initial c
29 mai
Choose Next Flow Action
Current state:
Feature: develop
Recommended actions:
Finish Feature
Other Action...
4
Start New Feature
Finish Feature
Start New Release
Finish Release
Start New Hotfix
Finish Hotfix
Pending files, sorted by file status
Commit: 8b134db714a0035d8c
Author: Mikael Krief <mikakrief
Date: mercredi 29 mai 2019 12
Committer: Mikael Krief
Initial commit
README.md
File Contents

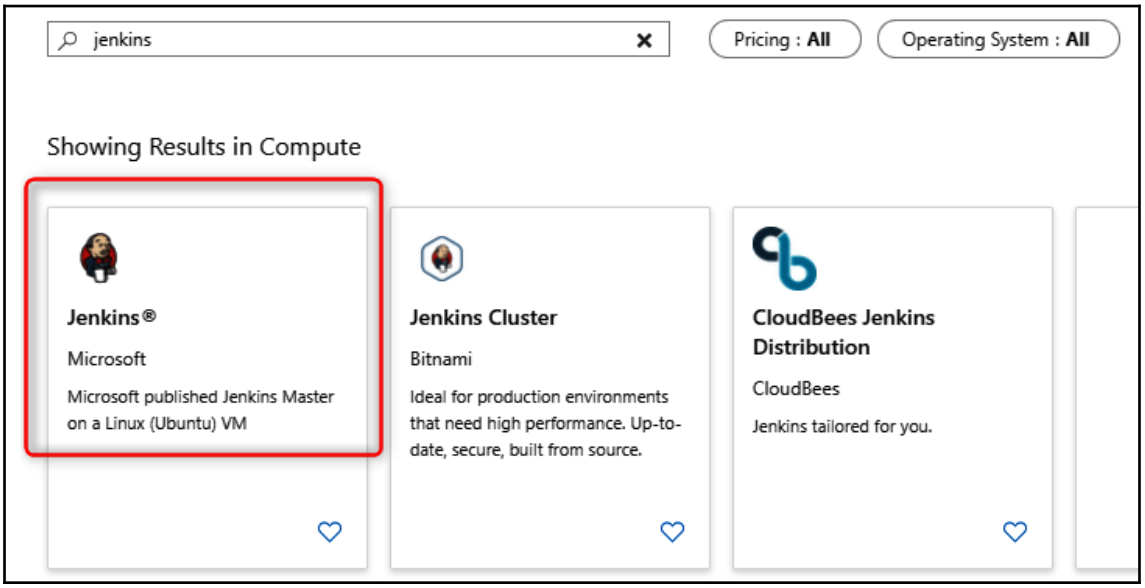
Chapter 6: Continuous Integration and Continuous Delivery

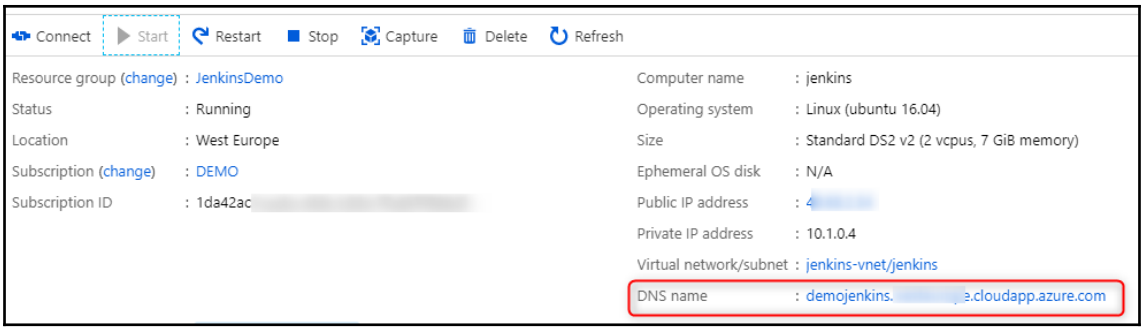


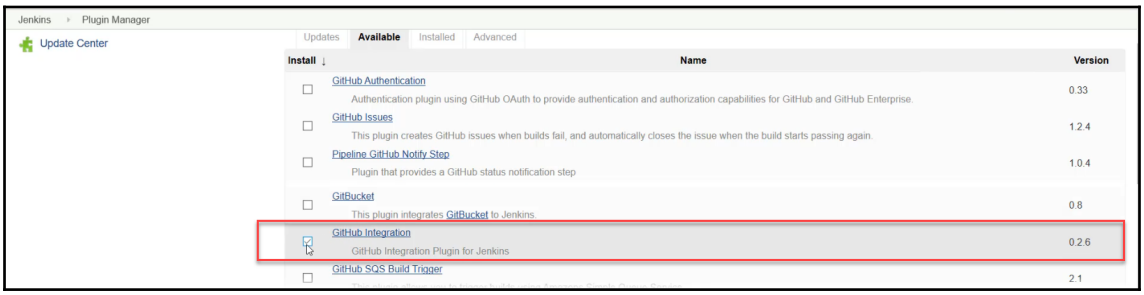

nuget
Packages
Upload
Statistics
Documentation
Downloads
Blog
Search for packages...
There are 155 895 packages
NUnit
by: charliepoole rprouse
42 874 936 total downloads
last updated 18 days ago
Latest version: 3.12.0
nunit test testing tdd
NUnit features a fluent assert syntax, parameterized, generic and theory tests and is user-extensible. This package which is referenced by your tests. You will need to install version 3 of the nunit3-console program or a third-party runner
Newtonsoft.Json
by: newtonsoft jamesnk
Json.NET
228 702 270 total downloads
last updated a month ago
Latest version: 12.0.2
json
Json.NET is a popular high-performance JSON framework for .NET
.NET
EntityFramework
by: EntityFramework aspnet Microsoft
63 760 274 total downloads
last updated 25 days ago
Latest version: 6.3.0-preview5-19254-05
Entity Framework is Microsoft's recommended data access technology for new applications.

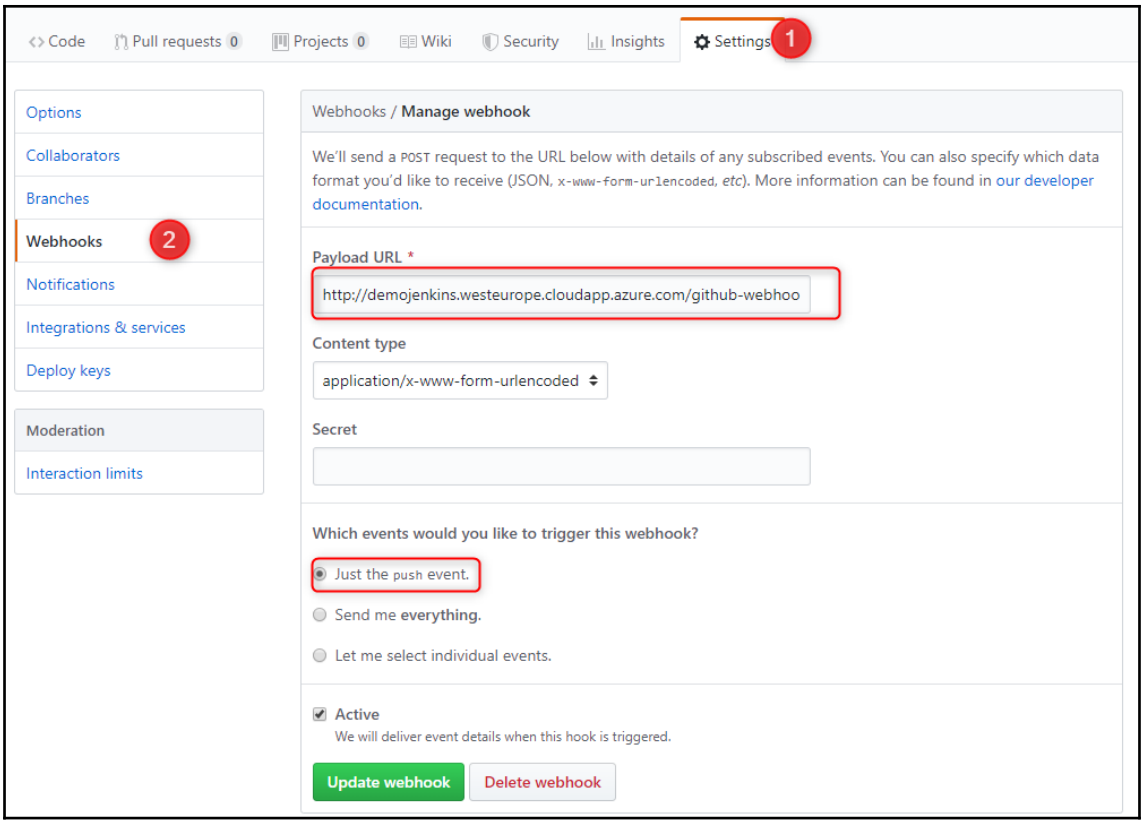

Repositories
Manage repositories
Create repository
1
Name
Type
maven-central
proxy
maven-public
group
maven-releases
hosted
maven-snapshots
hosted
nuget-group
group
nuget-hosted
hosted
nuget.org-proxy
proxy
Repositories
/
Select Recipe
Recipe
apt (hosted)
apt (proxy)
bower (group)
bower (hosted)
bower (proxy)
docker (group)
docker (hosted)
docker (proxy)
2
gitlfs (hosted)
go (group)
go (proxy)
maven2 (group)
maven2 (hosted)
maven2 (proxy)
npm (group)
npm (hosted)
npm (proxy)

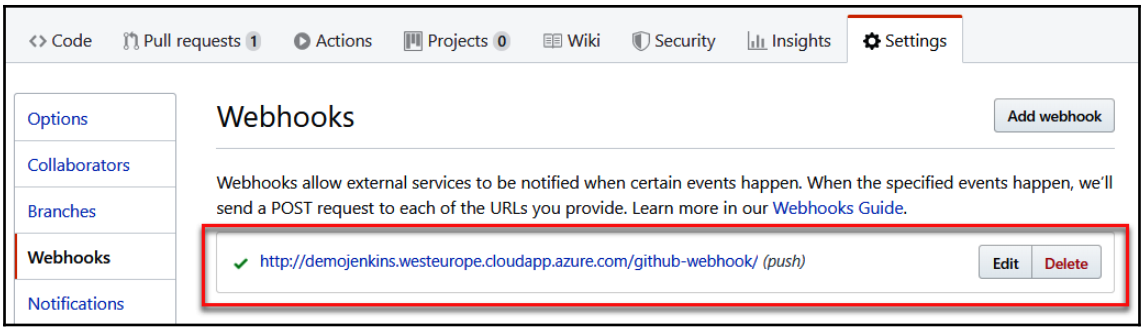

demo
New feed
Connect to feed
Recycle
Filter by keywords
This feed
Package
Views
Source
Downloads
Users
Version 1.1.3
This feed
6
2
ıode
Version 1.0.30
This feed
0
0
universal
Version 1.1.0
This feed
0
0
This feed
0
0
Version 1.1.1
This feed
0
0

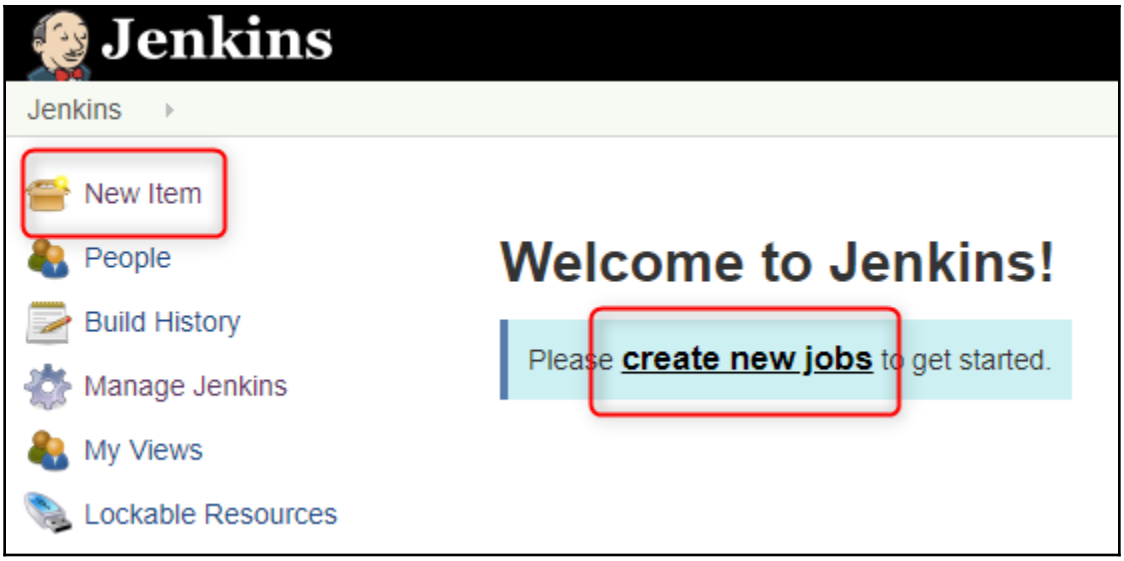

jenkins
Pricing : All
Operating System : All
Showing Results in Compute
Jenkins®
Microsoft
Microsoft published Jenkins Master on a Linux (Ubuntu) VM
Jenkins Cluster
Bitnami
Ideal for production environments that need high performance. Up-to-date, secure, built from source.
CloudBees Jenkins Distribution
CloudBees
Jenkins tailored for you.

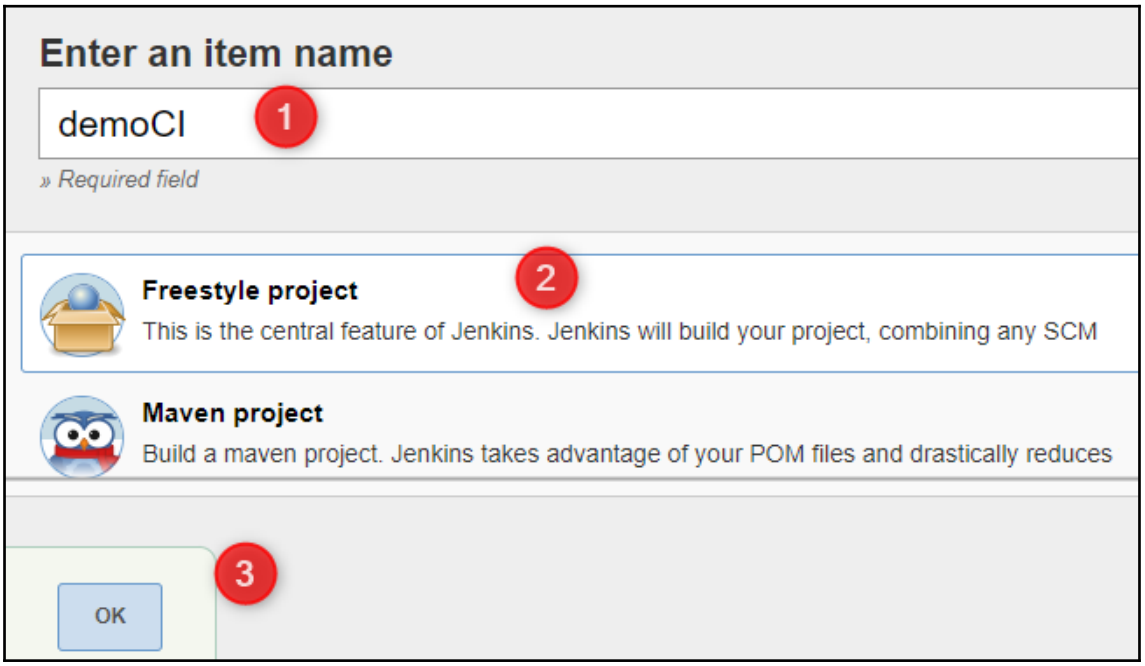

Connect
Start
Restart
Stop
Capture
Delete
Refresh
Resource group (change) : JenkinsDemo
Status : Running
Location : West Europe
Subscription (change) : DEMO
Subscription ID : 1da42ac
Computer name : jenkins
Operating system : Linux (ubuntu 16.04)
Size : Standard DS2 v2 (2 vcpus, 7 GiB memory)
Ephemeral OS disk : N/A
Public IP address :
Private IP address : 10.1.0.4
Virtual network/subnet : jenkins-vnet/jenkins
DNS name : demojenkins.
.cloudapp.azure.com

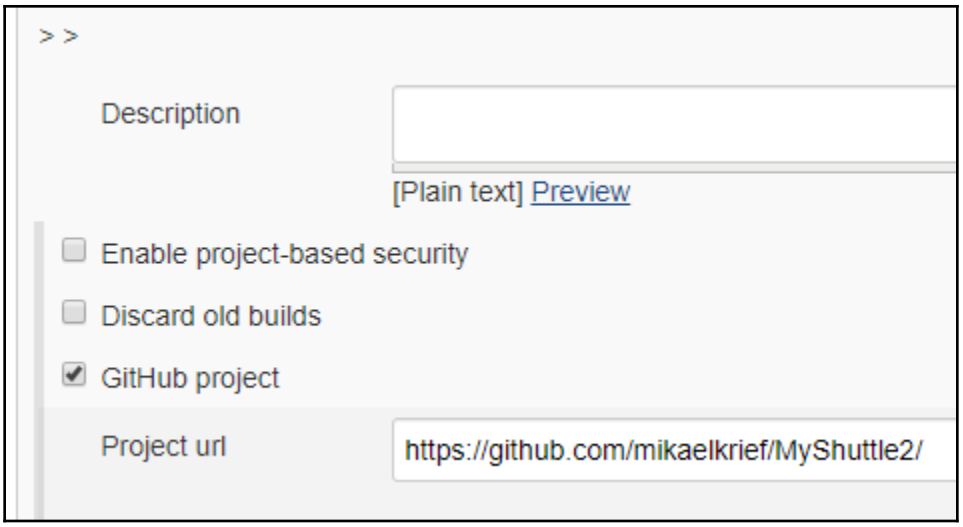

Jenkins
Plugin Manager
Update Center
Updates
Available
Installed
Advanced
Install
Name
Version
GitHub Authentication
Authentication plugin using GitHub OAuth to provide authentication and authorization capabilities for GitHub and GitHub Enterprise.
0.33
GitHub Issues
This plugin creates GitHub issues when builds fail, and automatically closes the issue when the build starts passing again.
1.2.4
Pipeline GitHub Notify Step
Plugin that provides a GitHub status notification step
1.0.4
GitBucket
This plugin integrates GitBucket to Jenkins.
0.8
GitHub Integration
GitHub Integration Plugin for Jenkins
0.2.6
GitHub SQS Build Trigger
2.1

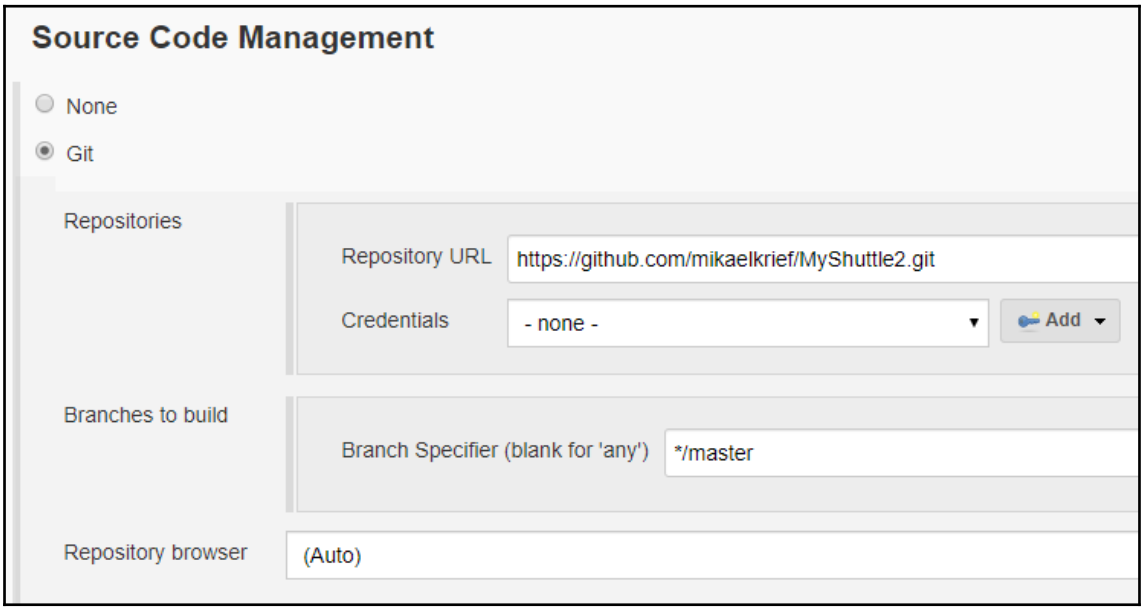

Code
Pull requests 0
Projects 0
Wiki
Security
Insights
Settings
1
Options
Collaborators
Branches
Webhooks
2
Notifications
Integrations & services
Deploy keys
Moderation
Interaction limits
Webhooks / Manage webhook
We'll send a POST request to the URL below with details of any subscribed events. You can also specify which data format you'd like to receive (JSON, x-www-form-urlencoded, etc). More information can be found in our developer documentation.
Payload URL *
http://demojenkins.westeurope.cloudapp.azure.com/github-webhoo
Content type
application/x-www-form-urlencoded
Secret
Which events would you like to trigger this webhook?
Just the push event.
Send me everything.
Let me select individual events.
Active
We will deliver event details when this hook is triggered.
Update webhook
Delete webhook

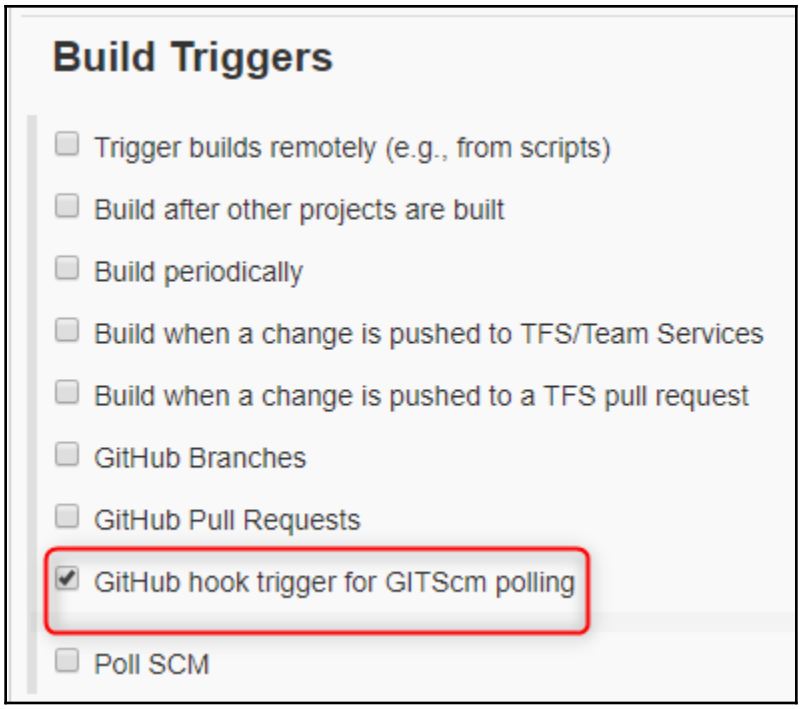

Code
Pull requests 1
Actions
Projects 0
Wiki
Security
Insights
Settings
Options
Collaborators
Branches
Webhooks
Notifications
Webhooks
Add webhook
Webhooks allow external services to be notified when certain events happen. When the specified events happen, we'll send a POST request to each of the URLs you provide. Learn more in our Webhooks Guide.
http://demojenkins.westeurope.cloudapp.azure.com/github-webhook/ (push)
Edit
Delete

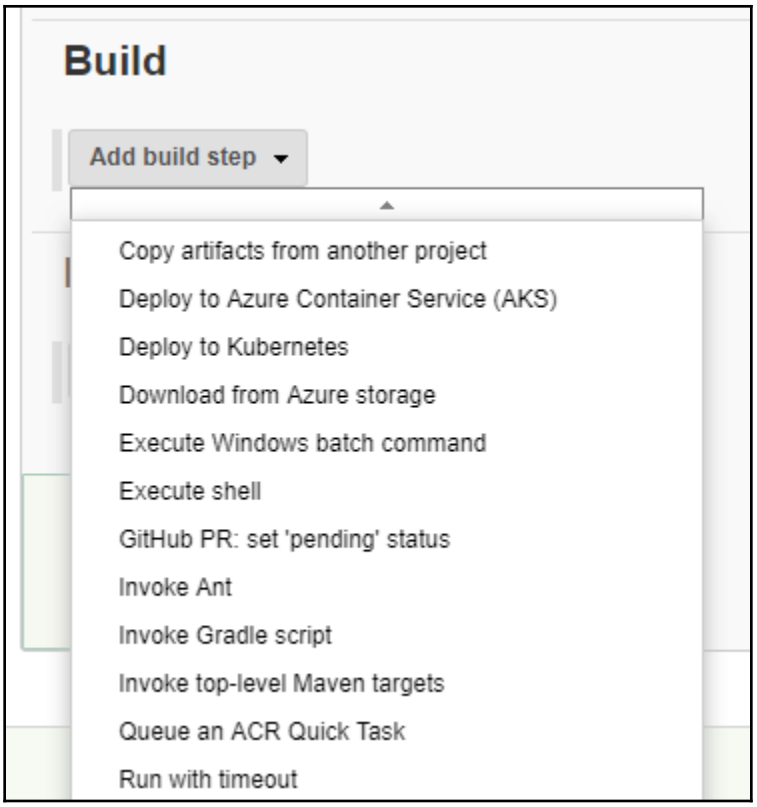

Jenkins
Jenkins
New Item
People
Build History
Manage Jenkins
My Views
Lockable Resources
Welcome to Jenkins!
Please create new jobs to get started.

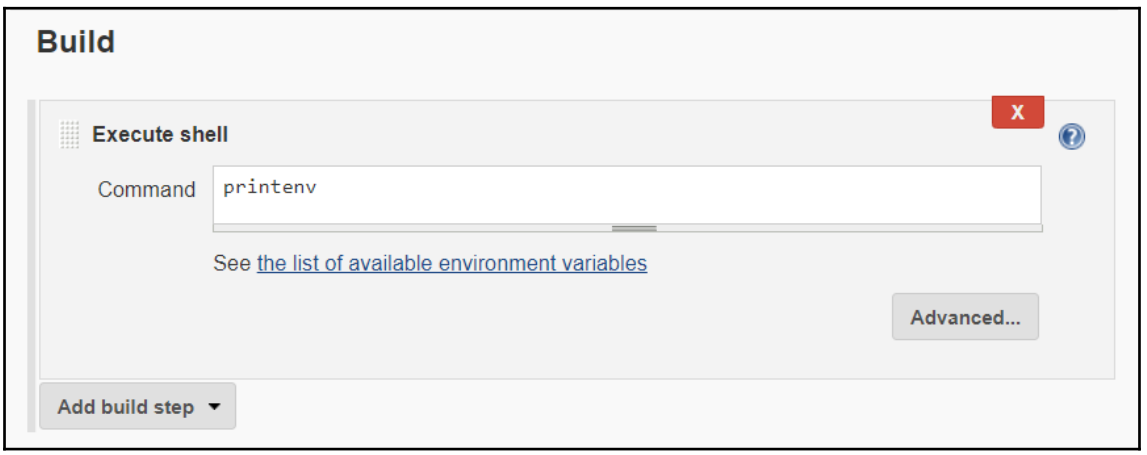

Enter an item name
demoCI
1
» Required field
Freestyle project
2
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM
Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces
3
OK

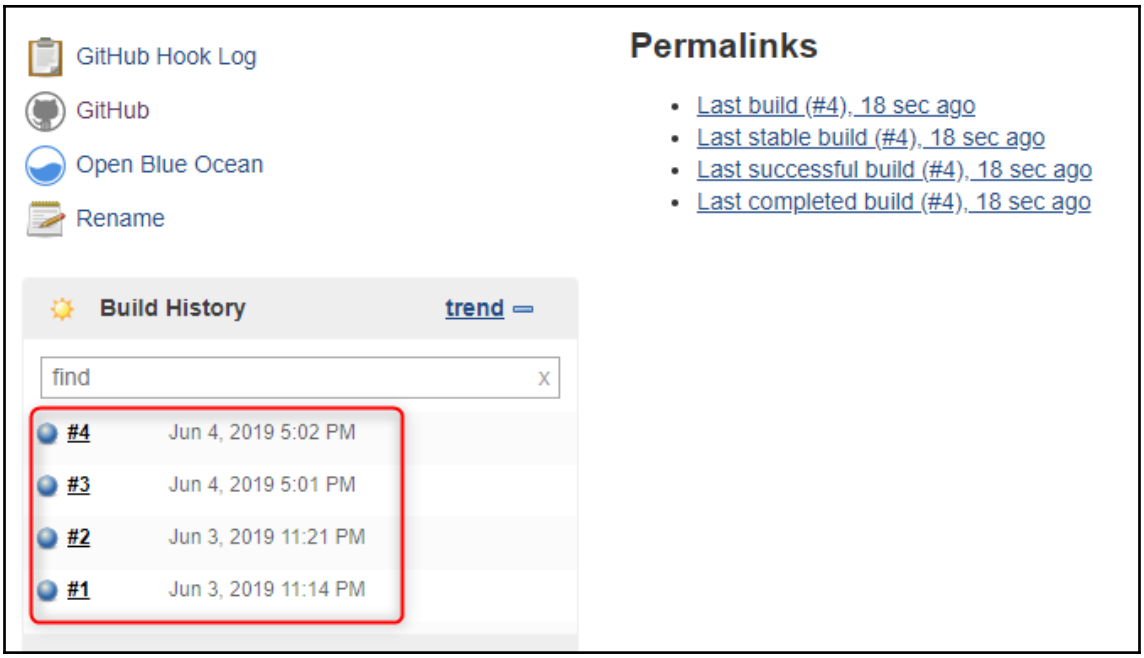

> >
Description
[Plain text] Preview
Enable project-based security
Discard old builds
GitHub project
Project url
https://github.com/mikaelkrief/MyShuttle2/

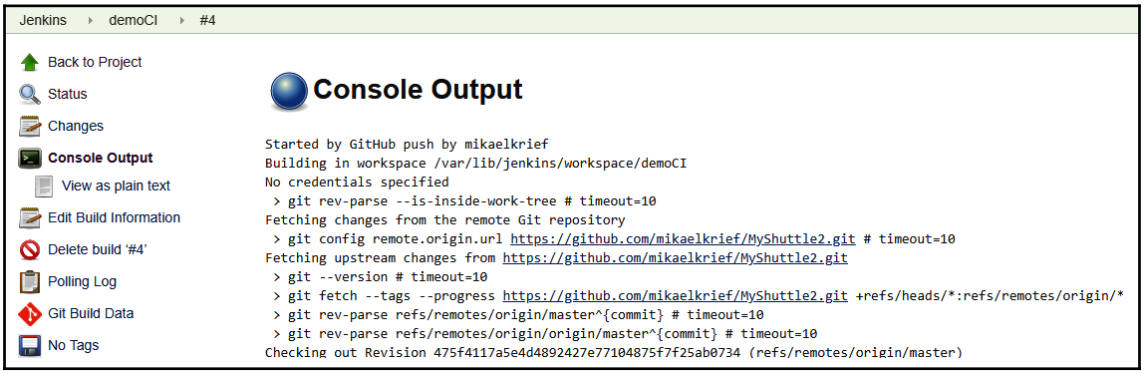

Source Code Management
None
Git
Repositories
Repository URL
https://github.com/mikaelkrief/MyShuttle2.git
Credentials
- none -
Add
Branches to build
Branch Specifier (blank for 'any')
*/master
Repository browser
(Auto)

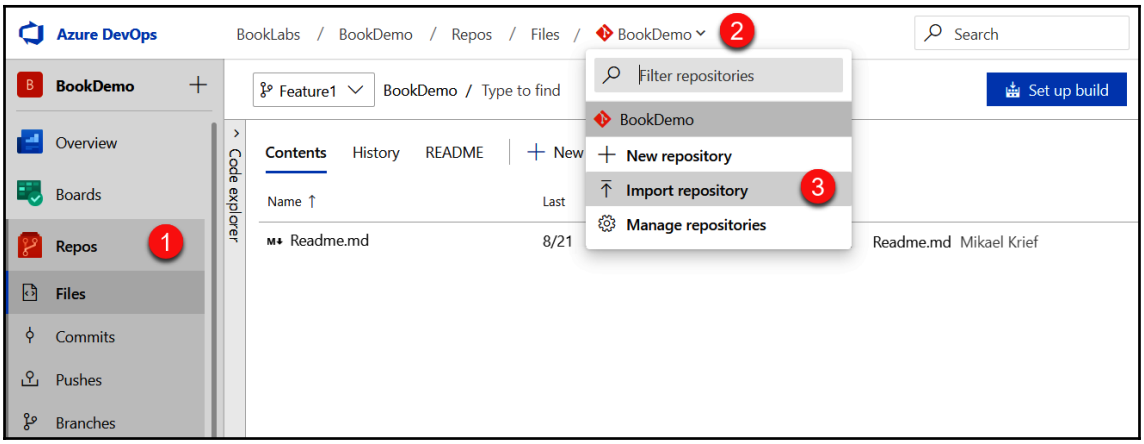

Build Triggers
Trigger builds remotely (e.g., from scripts)
Build after other projects are built
Build periodically
Build when a change is pushed to TFS/Team Services
Build when a change is pushed to a TFS pull request
GitHub Branches
GitHub Pull Requests
GitHub hook trigger for GITScm polling
Poll SCM

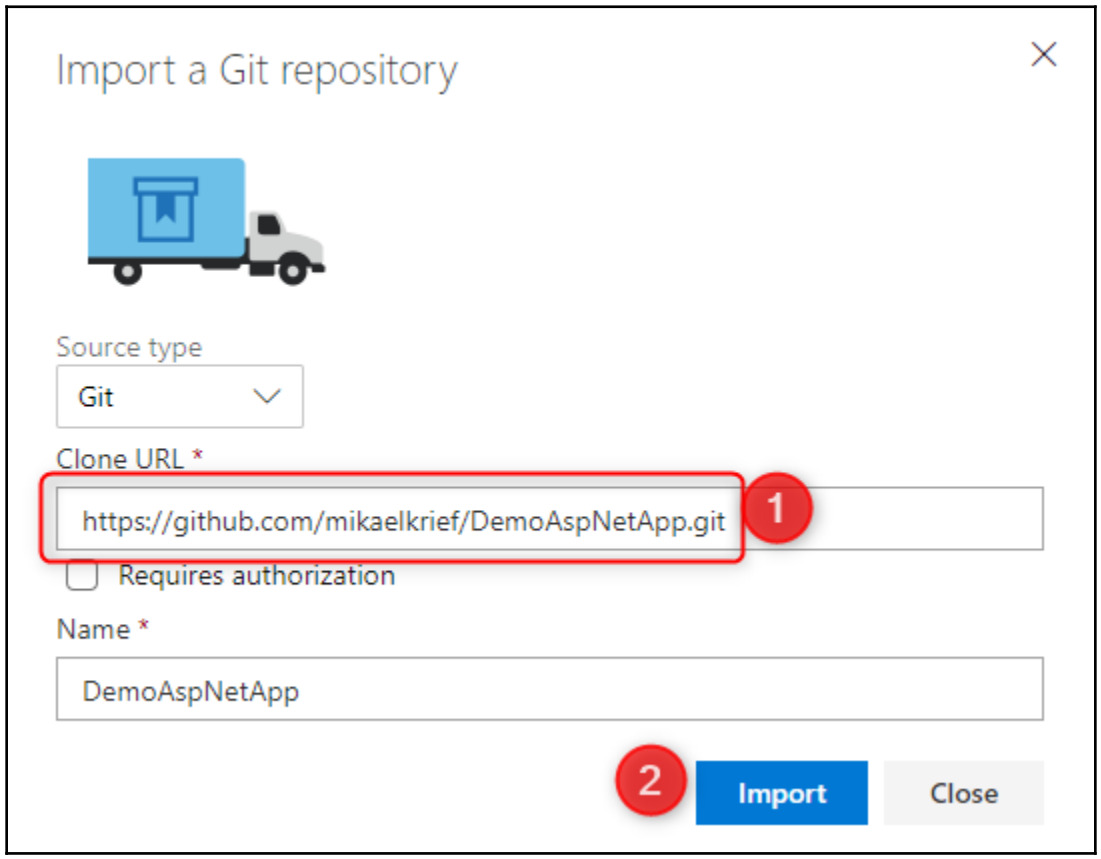

Build
Add build step
Copy artifacts from another project
Deploy to Azure Container Service (AKS)
Deploy to Kubernetes
Download from Azure storage
Execute Windows batch command
Execute shell
GitHub PR: set 'pending' status
Invoke Ant
Invoke Gradle script
Invoke top-level Maven targets
Queue an ACR Quick Task
Run with timeout

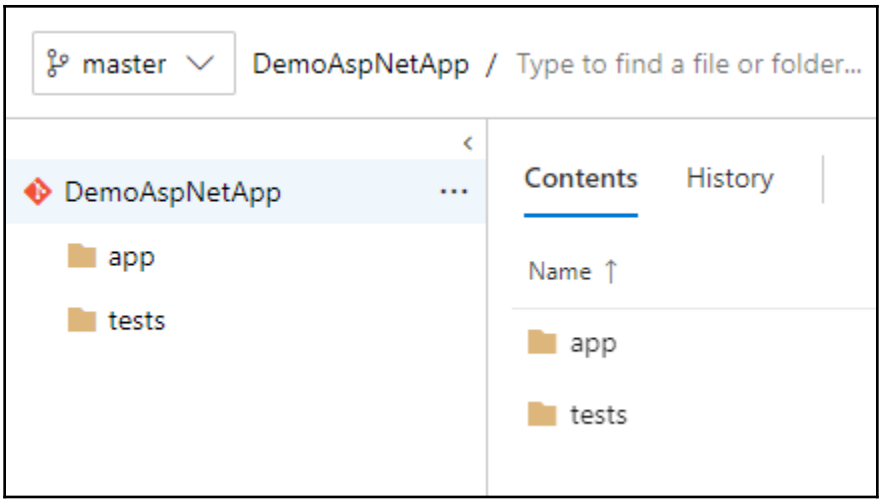

Build
Execute shell
Command
printenv
See the list of available environment variables
Advanced...
Add build step

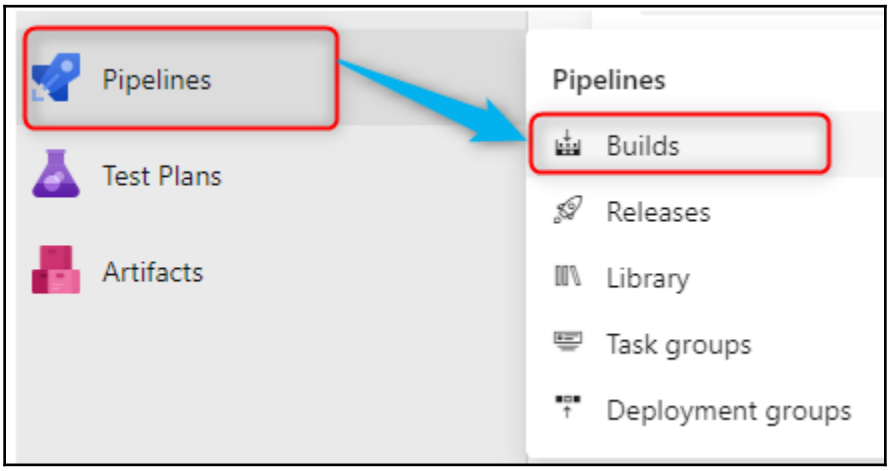

GitHub Hook Log
GitHub
Open Blue Ocean
Rename
Build History
trend
find
#4 Jun 4, 2019 5:02 PM
#3 Jun 4, 2019 5:01 PM
#2 Jun 3, 2019 11:21 PM
#1 Jun 3, 2019 11:14 PM
Permalinks
Last build (#4), 18 sec ago
Last stable build (#4), 18 sec ago
Last successful build (#4), 18 sec ago
Last completed build (#4), 18 sec ago

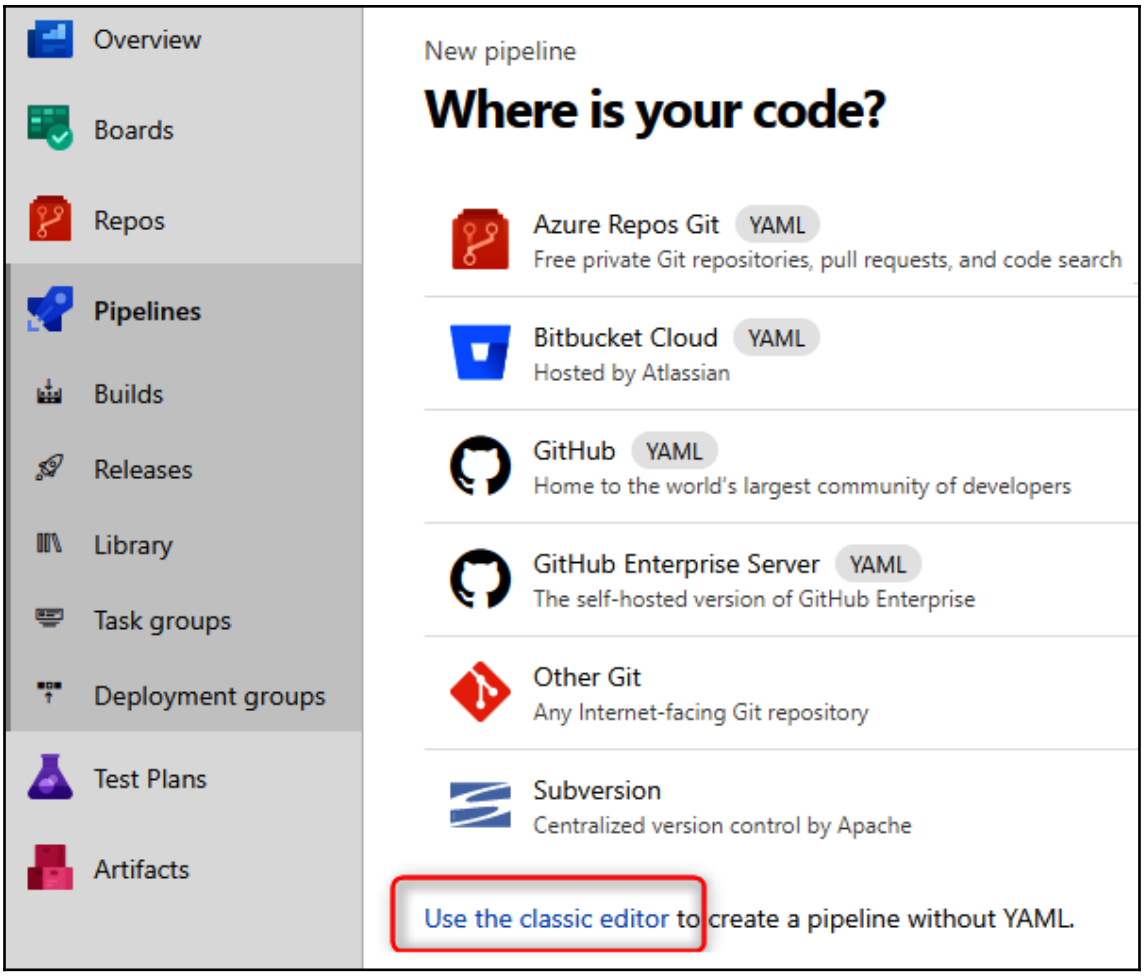

Jenkins
demoCI
#4
Back to Project
Status
Changes
Console Output
View as plain text
Edit Build Information
Delete build '#4'
Polling Log
Git Build Data
No Tags
Console Output
Started by GitHub push by mikaelkrief
Building in workspace /var/lib/jenkins/workspace/demoCI
No credentials specified
> git rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/mikaelkrief/MyShuttle2.git # timeout=10
Fetching upstream changes from https://github.com/mikaelkrief/MyShuttle2.git
> git --version # timeout=10
> git fetch --tags --progress https://github.com/mikaelkrief/MyShuttle2.git +refs/heads/*:refs/remotes/origin/*
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> git rev-parse refs/remotes/origin/origin/master^{commit} # timeout=10
Checking out Revision 475f4117a5e4d4892427e77104875f7f25ab0734 (refs/remotes/origin/master)

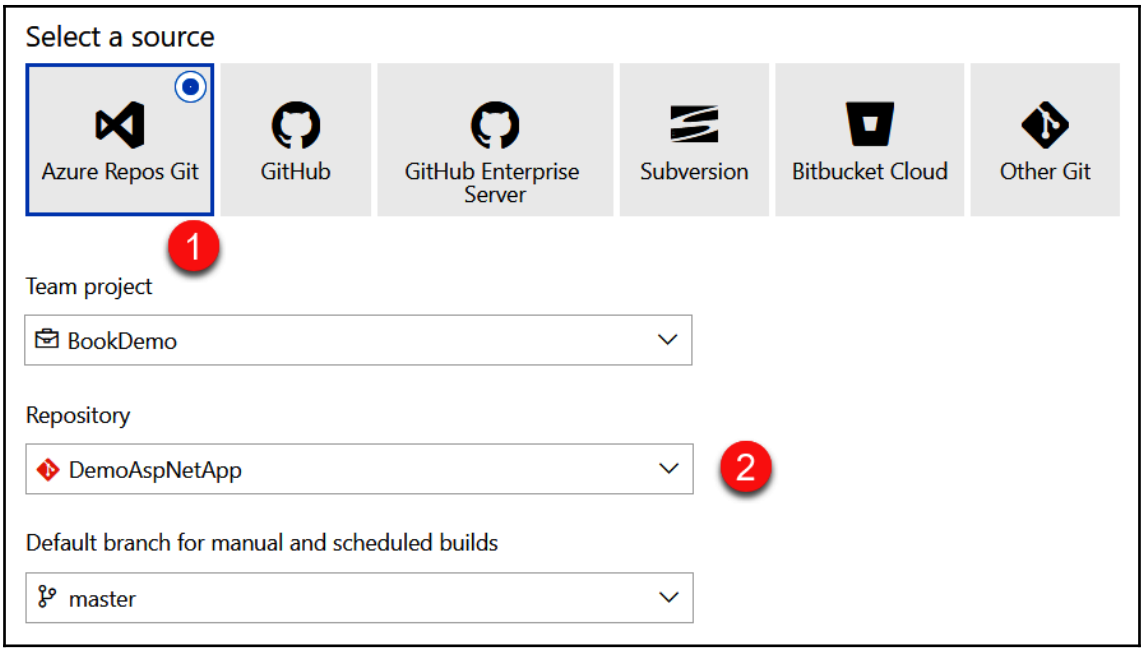

Azure DevOps
BookLabs / BookDemo / Repos / Files / BookDemo
2
Search
BookDemo
Feature1
BookDemo / Type to find
Filter repositories
BookDemo
New repository
Import repository
3
Manage repositories
Set up build
Overview
Boards
Repos
1
Files
Commits
Pushes
Branches
Code explorer
Contents
History
README
New
Name
Last
Readme.md
8/21
Readme.md Mikael Krief

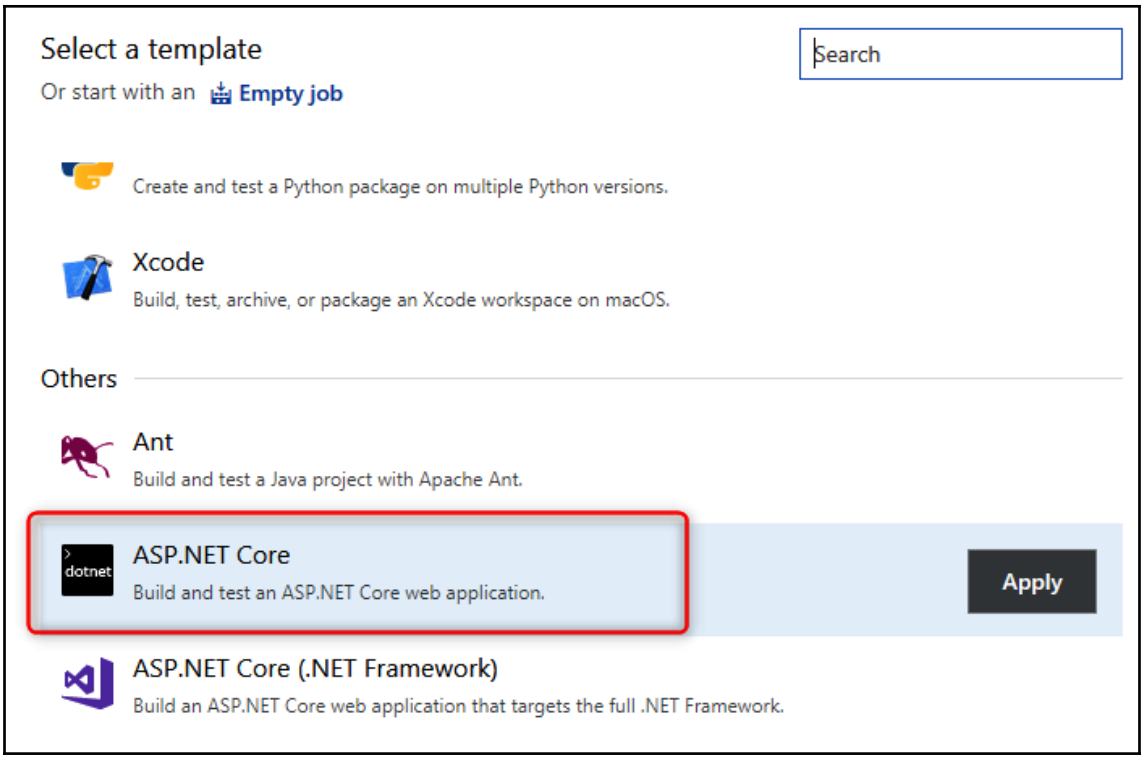

Import a Git repository
Source type
Git
Clone URL *
https://github.com/mikaelkrief/DemoAspNetApp.git
1
Requires authorization
Name *
DemoAspNetApp
2
Import
Close

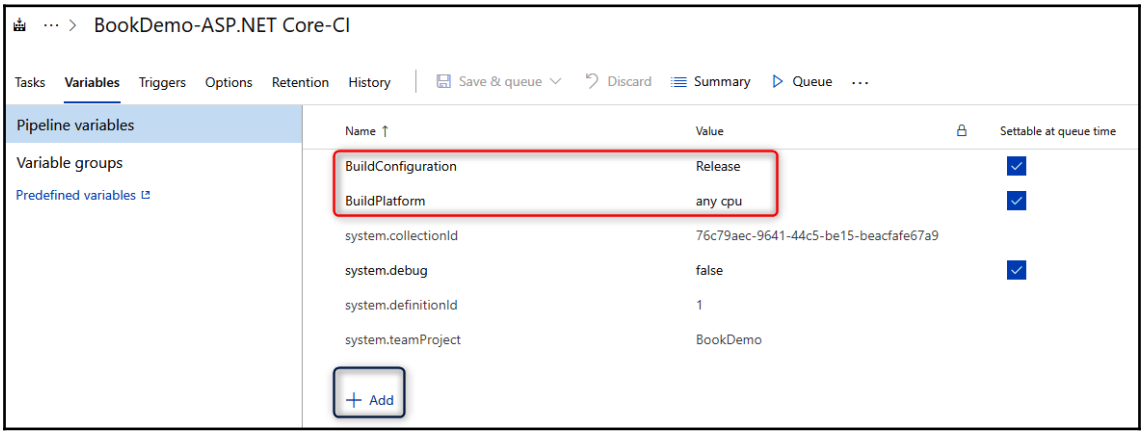

master
DemoAspNetApp / Type to find a file or folder...
DemoAspNetApp
app
tests
Contents
History
Name ↑
app
tests

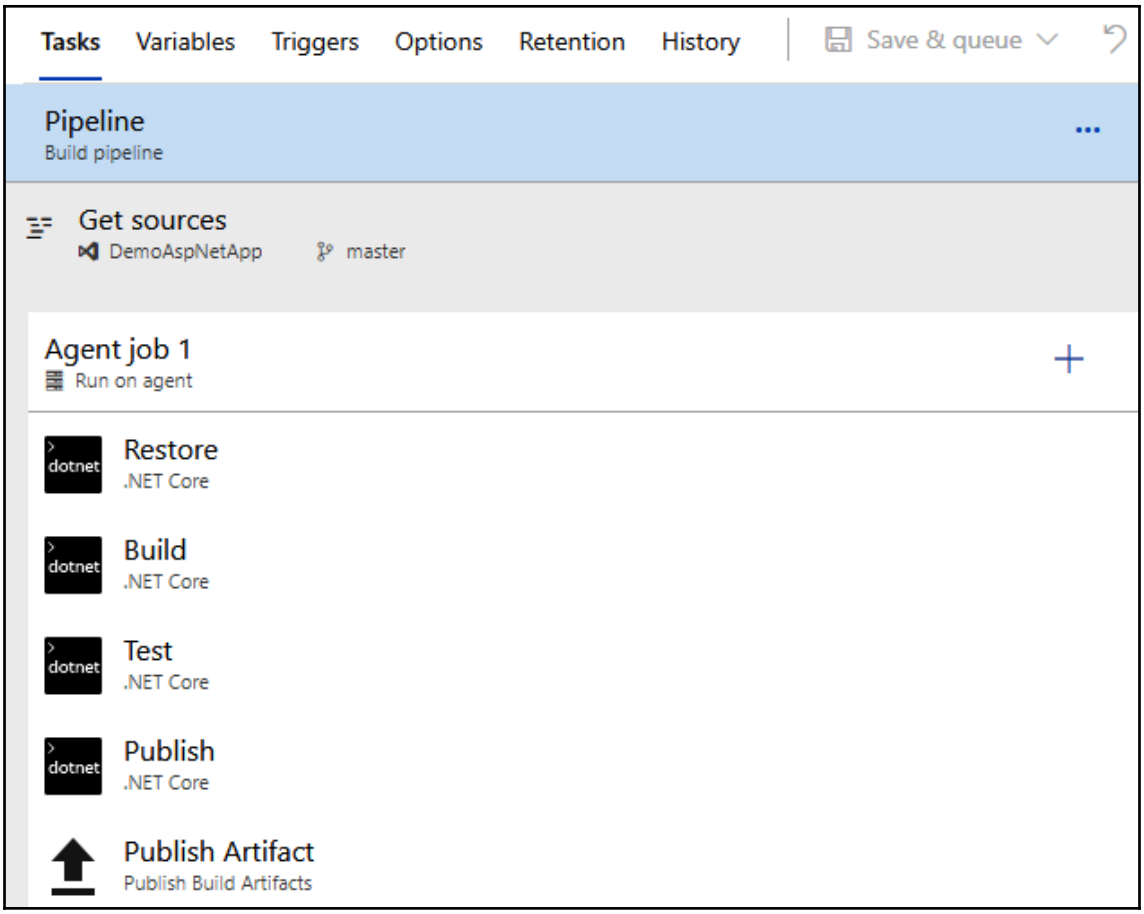

Pipelines
Test Plans
Artifacts
Pipelines
Builds
Releases
Library
Task groups
Deployment groups

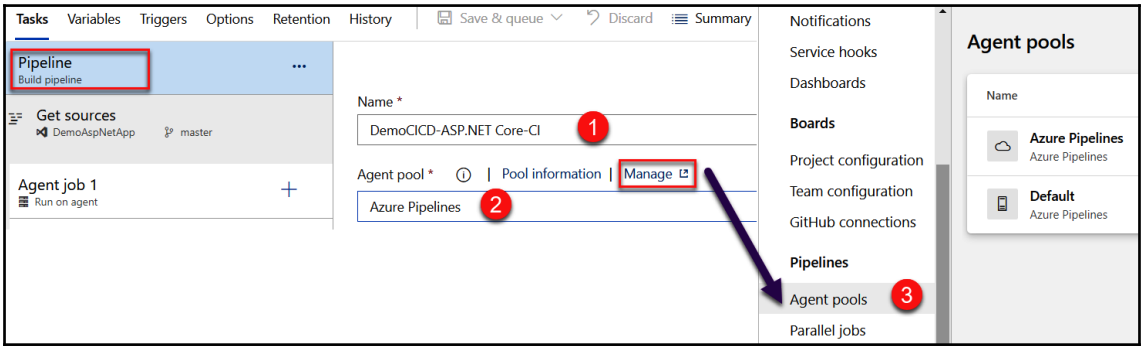

Overview
Boards
Repos
Pipelines
Builds
Releases
Library
Task groups
Deployment groups
Test Plans
Artifacts
New pipeline
Where is your code?
Azure Repos Git YAML
Free private Git repositories, pull requests, and code search
Bitbucket Cloud YAML
Hosted by Atlassian
GitHub YAML
Home to the world's largest community of developers
GitHub Enterprise Server YAML
The self-hosted version of GitHub Enterprise
Other Git
Any Internet-facing Git repository
Subversion
Centralized version control by Apache
Use the classic editor to create a pipeline without YAML.

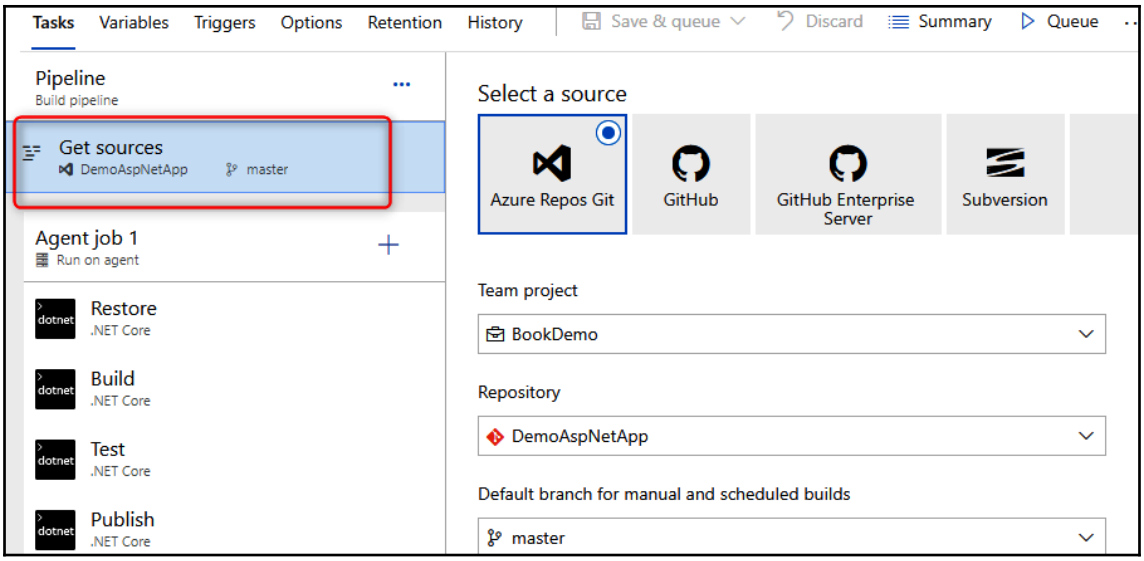

Select a source
Azure Repos Git
GitHub
GitHub Enterprise Server
Subversion
Bitbucket Cloud
Other Git
1
Team project
BookDemo
Repository
DemoAspNetApp
2
Default branch for manual and scheduled builds
master

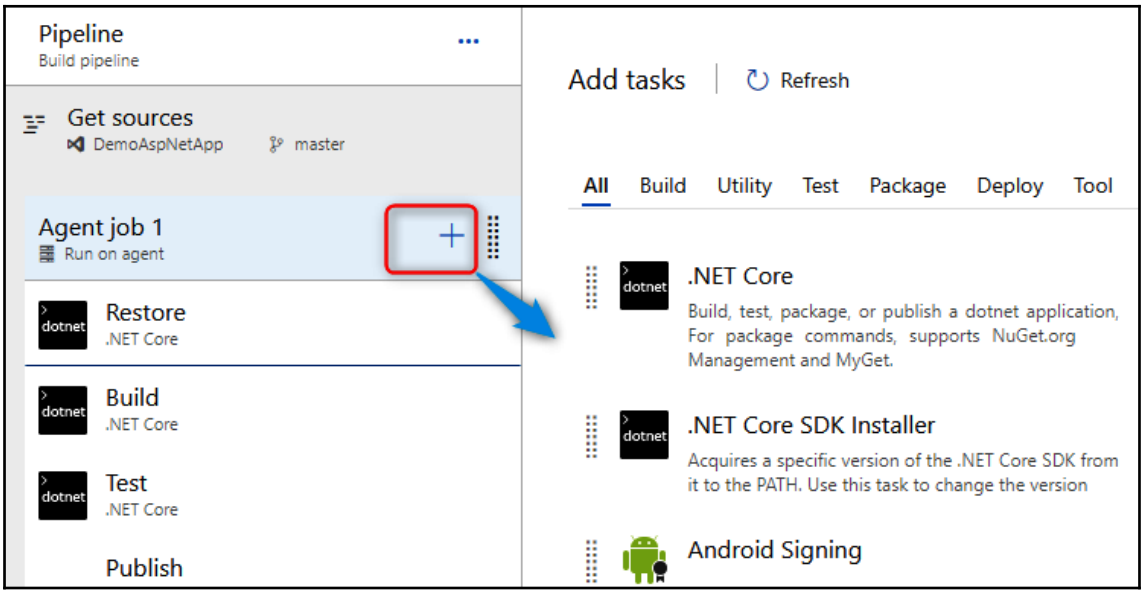

Select a template
Search
Or start with an Empty job
Create and test a Python package on multiple Python versions.
Xcode
Build, test, archive, or package an Xcode workspace on macOS.
Others
Ant
Build and test a Java project with Apache Ant.
dotnet
ASP.NET Core
Build and test an ASP.NET Core web application.
Apply
ASP.NET Core (.NET Framework)
Build an ASP.NET Core web application that targets the full .NET Framework.

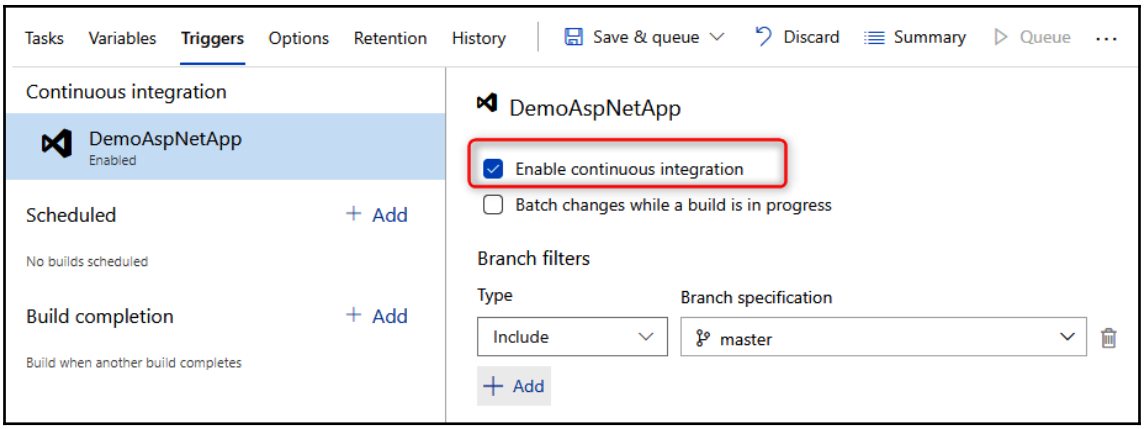

BookDemo-ASP.NET Core-CI
Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Summary
Queue
Pipeline variables
Variable groups
Predefined variables
Name
Value
Settable at queue time
BuildConfiguration
Release
BuildPlatform
any cpu
system.collectionId
76c79aec-9641-44c5-be15-beacfafe67a9
system.debug
false
system.definitionId
1
system.teamProject
BookDemo
Add

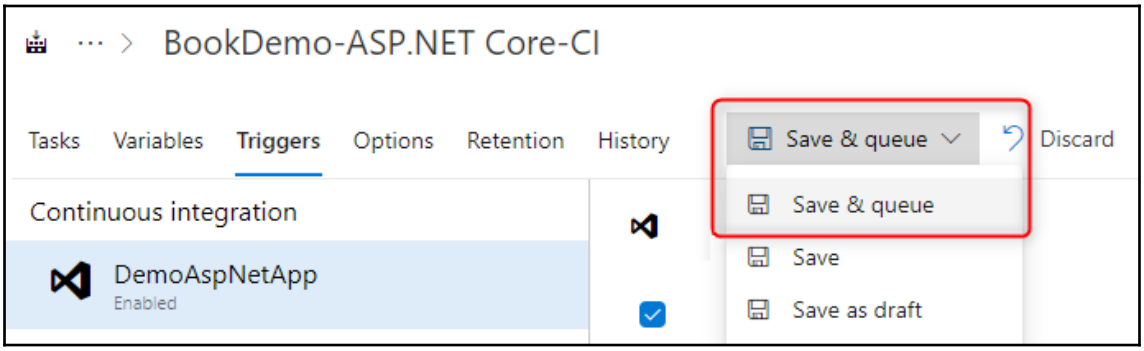

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Pipeline
Build pipeline
Get sources
DemoAspNetApp
master
Agent job 1
Run on agent
Restore
.NET Core
Build
.NET Core
Test
.NET Core
Publish
.NET Core
Publish Artifact
Publish Build Artifacts

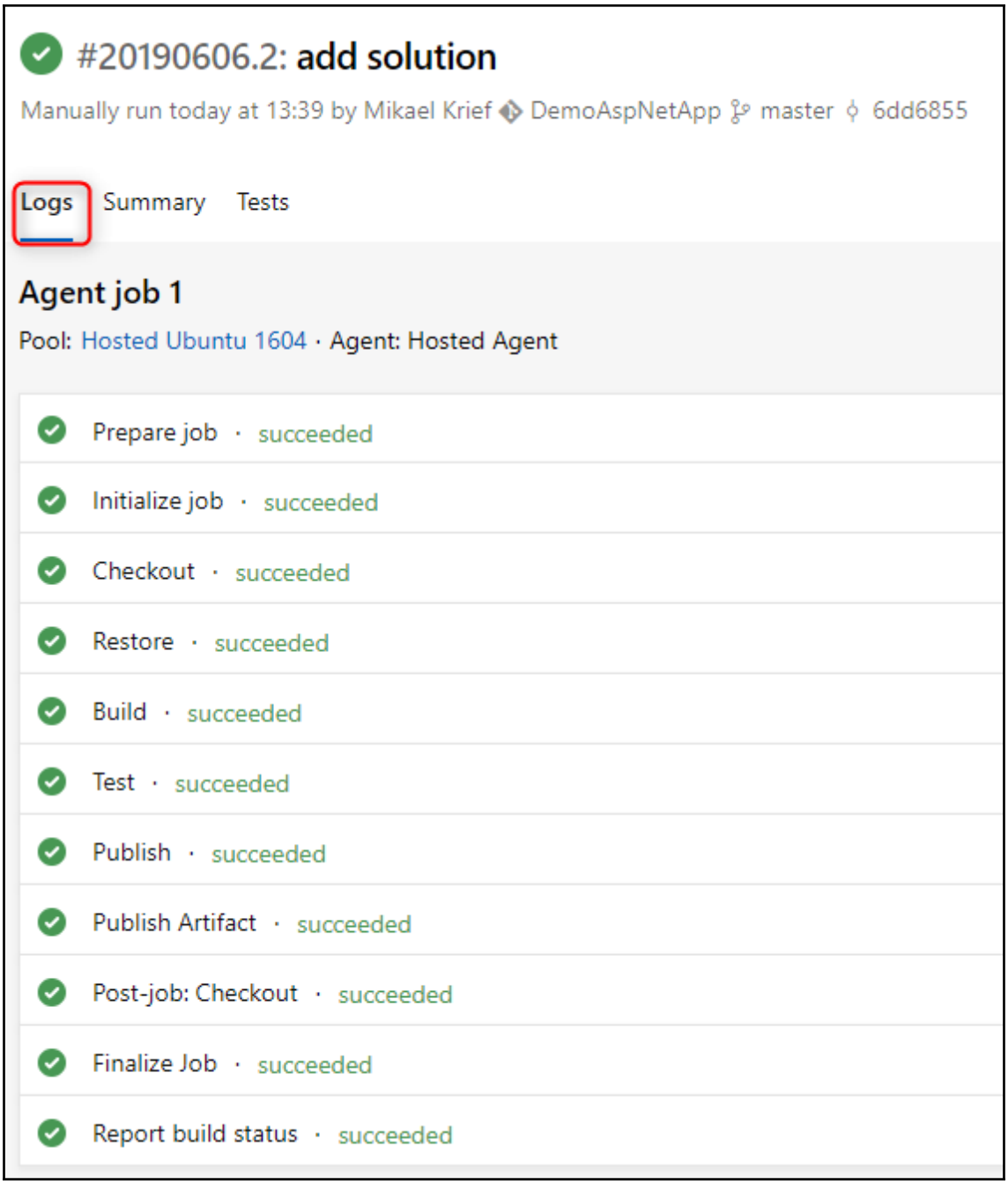

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Summary
Pipeline
Build pipeline
Get sources
DemoAspNetApp
master
Agent job 1
Run on agent
Name *
DemoCICD-ASP.NET Core-CI
1
Agent pool *
Pool information
Manage
Azure Pipelines
2
Notifications
Service hooks
Dashboards
Boards
Project configuration
Team configuration
GitHub connections
Pipelines
Agent pools
3
Parallel jobs
Agent pools
Name
Azure Pipelines
Azure Pipelines
Default
Azure Pipelines

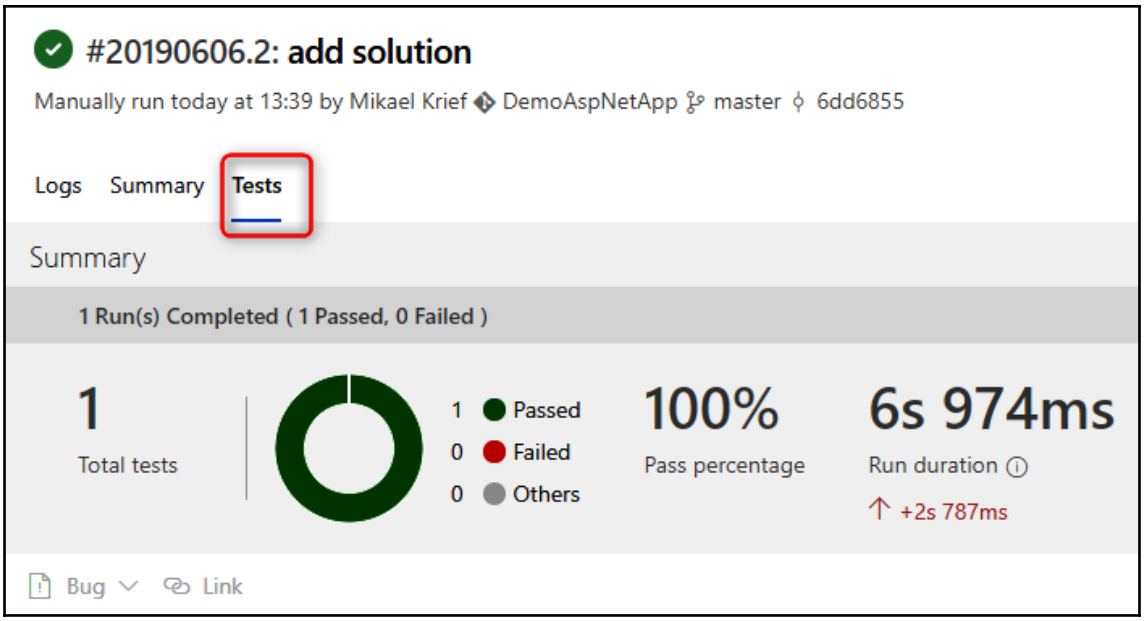

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Summary
Queue
Pipeline
Build pipeline
Get sources
DemoAspNetApp
master
Agent job 1
Run on agent
Restore
.NET Core
Build
.NET Core
Test
.NET Core
Publish
.NET Core
Select a source
Azure Repos Git
GitHub
GitHub Enterprise Server
Subversion
Team project
BookDemo
Repository
DemoAspNetApp
Default branch for manual and scheduled builds
master


Pipeline
Build pipeline
Get sources
DemoAspNetApp
master
Agent job 1
Run on agent
Restore
.NET Core
Build
.NET Core
Test
.NET Core
Publish
Add tasks
Refresh
All
Build
Utility
Test
Package
Deploy
Tool
.NET Core
Build, test, package, or publish a dotnet application, For package commands, supports NuGet.org Management and MyGet.
.NET Core SDK Installer
Acquires a specific version of the .NET Core SDK from it to the PATH. Use this task to change the version
Android Signing

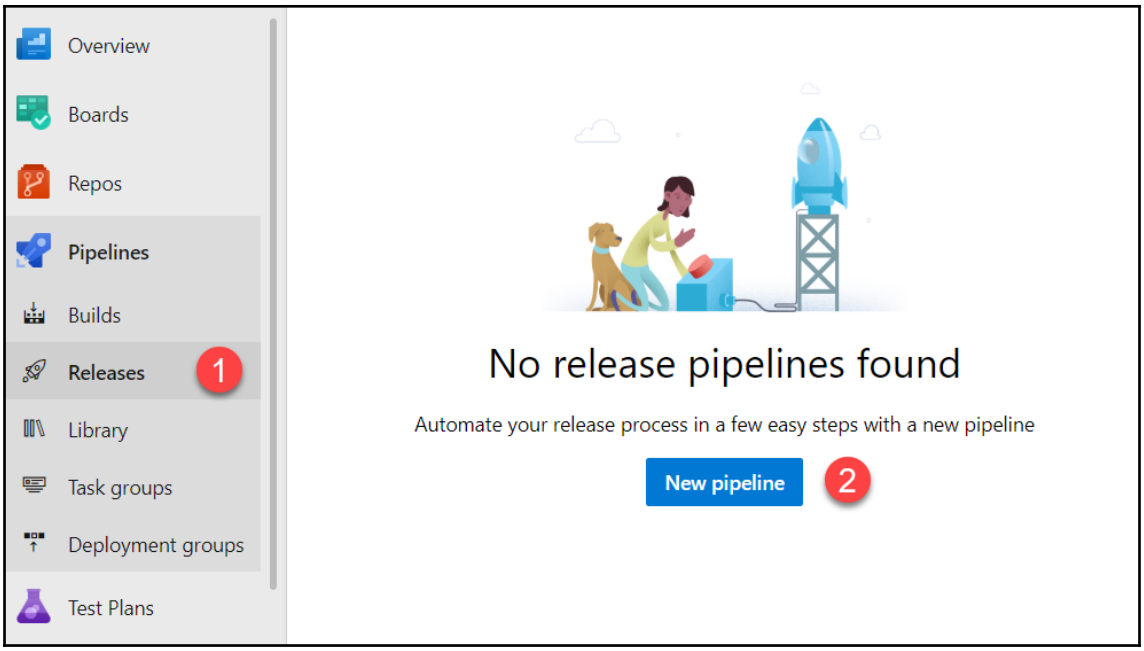

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Summary
Queue
Continuous integration
DemoAspNetApp
Enabled
Scheduled
Add
No builds scheduled
Build completion
Add
Build when another build completes
DemoAspNetApp
Enable continuous integration
Batch changes while a build is in progress
Branch filters
Type
Branch specification
Include
master
Add

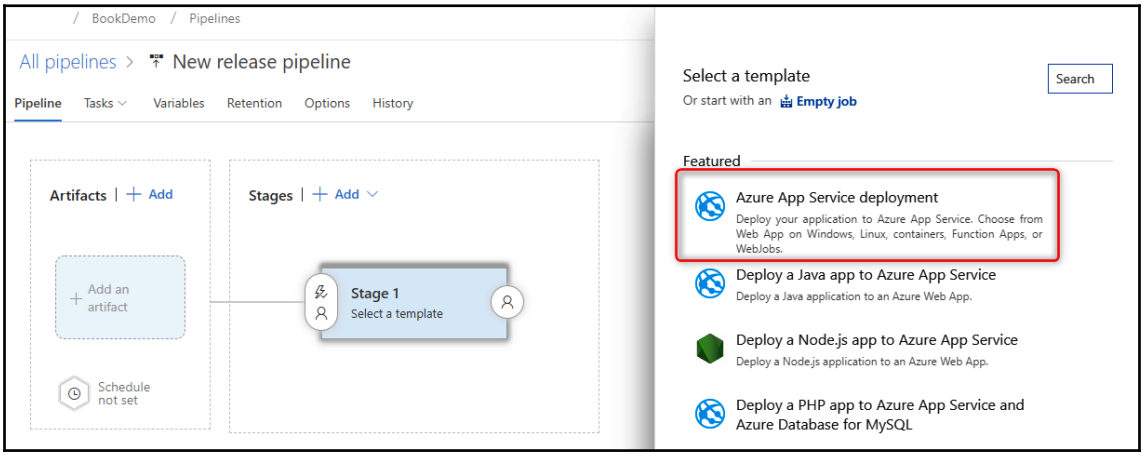

BookDemo-ASP.NET Core-CI
Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Continuous integration
DemoAspNetApp
Enabled
Save & queue
Save
Save as draft

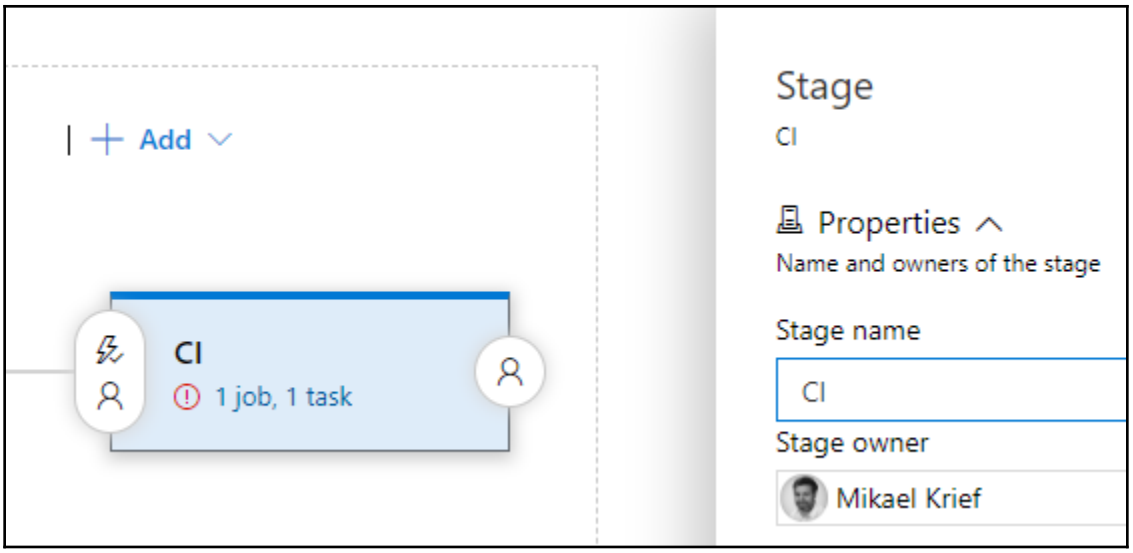

#20190606.2: add solution
Manually run today at 13:39 by Mikael Krief DemoAspNetApp master 6dd6855
Logs
Summary
Tests
Agent job 1
Pool: Hosted Ubuntu 1604 · Agent: Hosted Agent
Prepare job · succeeded
Initialize job · succeeded
Checkout · succeeded
Restore · succeeded
Build · succeeded
Test · succeeded
Publish · succeeded
Publish Artifact · succeeded
Post-job: Checkout · succeeded
Finalize Job · succeeded
Report build status · succeeded

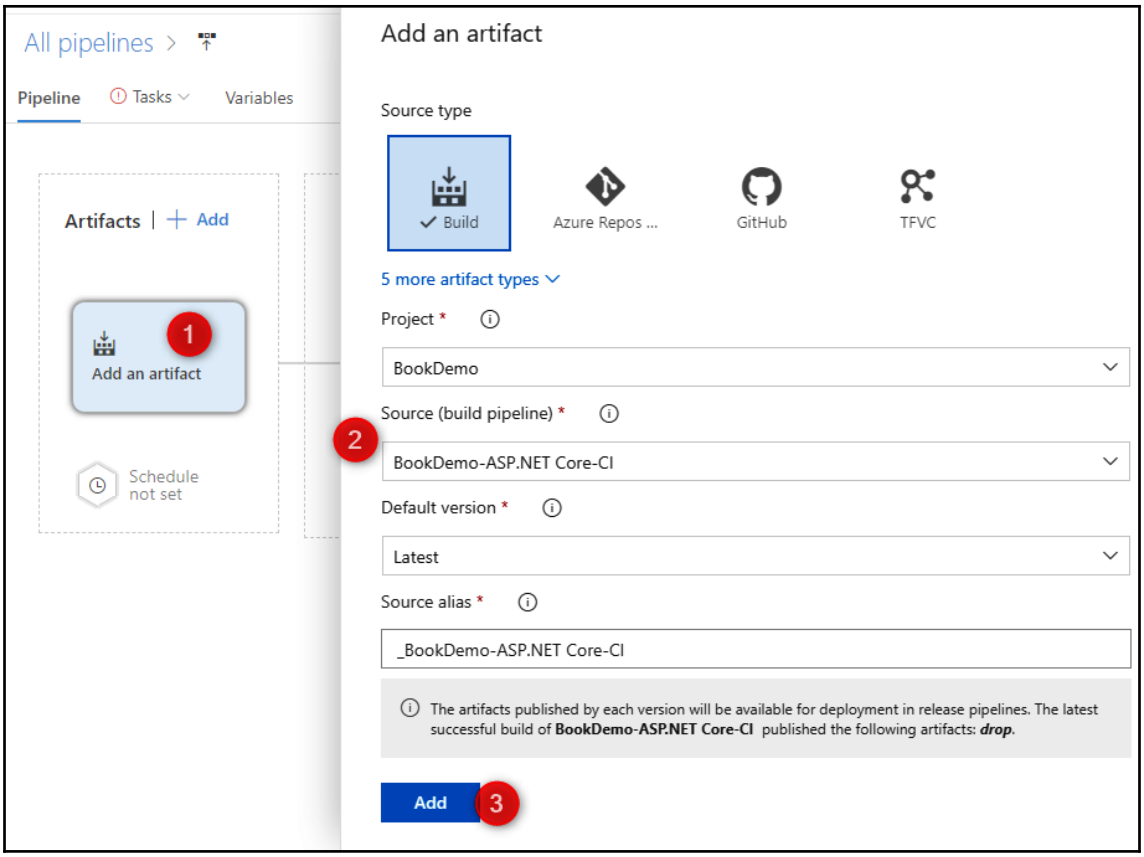

#20190606.2: add solution
Manually run today at 13:39 by Mikael Krief DemoAspNetApp master 6dd6855
Logs
Summary
Tests
Summary
1 Run(s) Completed (1 Passed, 0 Failed)
1
Total tests
1 Passed
0 Failed
0 Others
100%
Pass percentage
6s 974ms
Run duration
+2s 787ms
Bug
Link

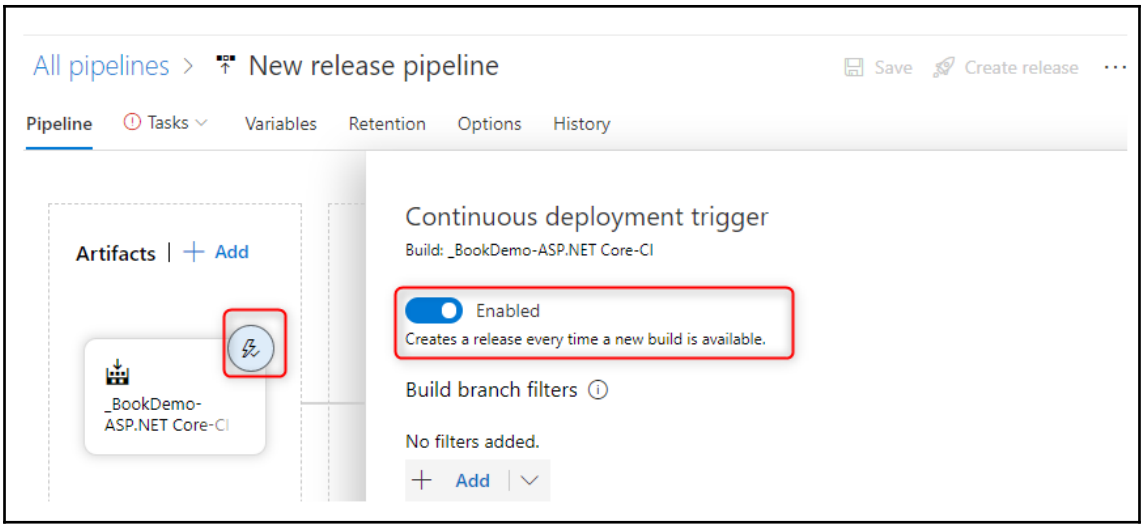
Release
Artifacts
Artifacts explorer
drop
app.zip

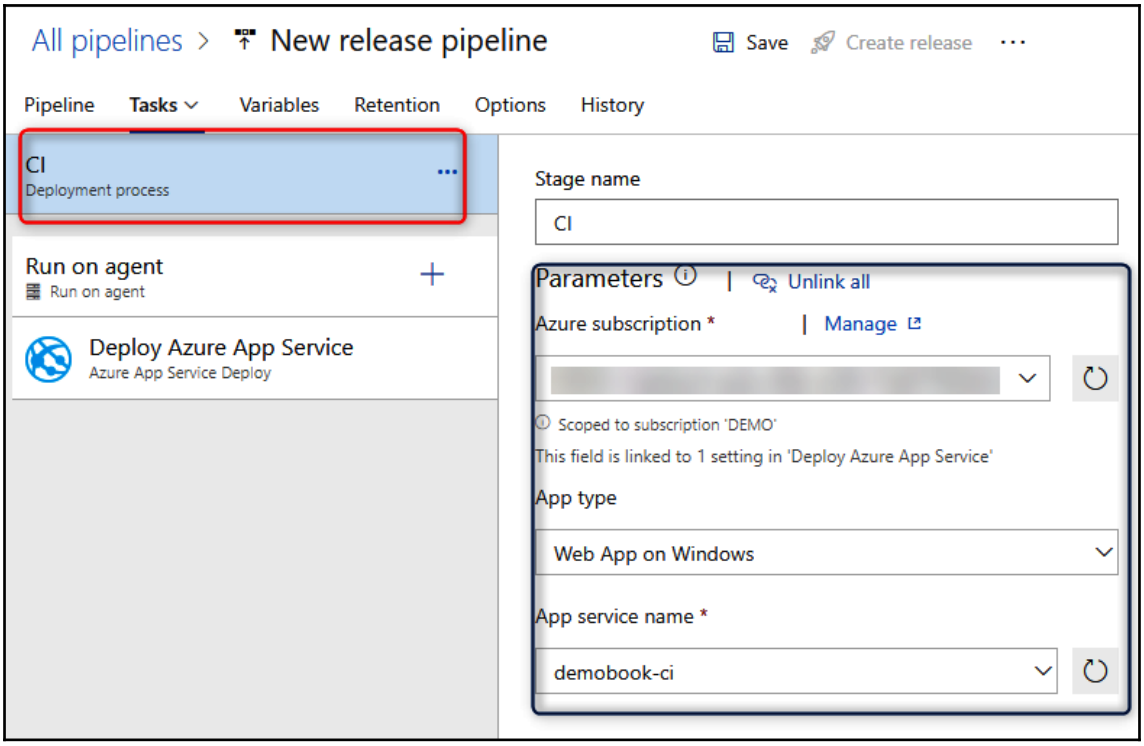

Overview
Boards
Repos
Pipelines
Builds
Releases
1
Library
Task groups
Deployment groups
Test Plans
No release pipelines found
Automate your release process in a few easy steps with a new pipeline
New pipeline
2

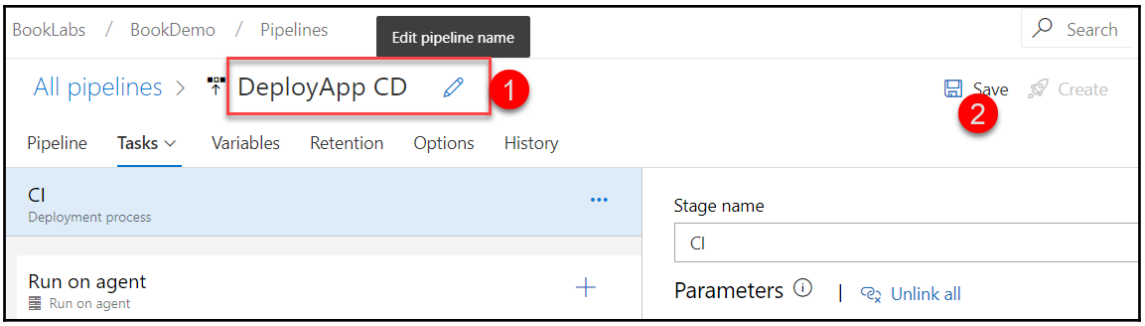

BookDemo / Pipelines
All pipelines > New release pipeline
Pipeline
Tasks
Variables
Retention
Options
History
Artifacts | Add
Add an artifact
Schedule not set
Stages | Add
Stage 1
Select a template
Select a template
Or start with an Empty job
Search
Featured
Azure App Service deployment
Deploy your application to Azure App Service. Choose from Web App on Windows, Linux, containers, Function Apps, or WebJobs.
Deploy a Java app to Azure App Service
Deploy a Java application to an Azure Web App.
Deploy a Node.js app to Azure App Service
Deploy a Node.js application to an Azure Web App.
Deploy a PHP app to Azure App Service and Azure Database for MySQL

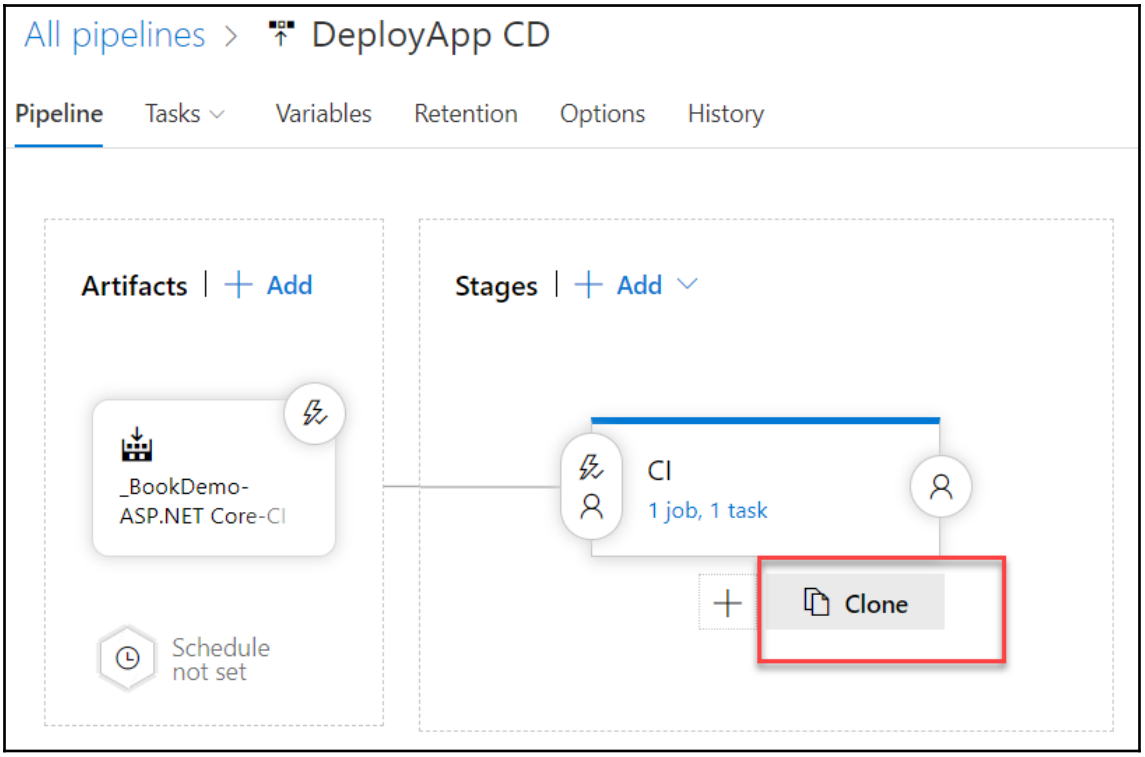

Add
CI
1 job, 1 task
Stage
CI
Properties
Name and owners of the stage
Stage name
CI
Stage owner
Mikael Krief

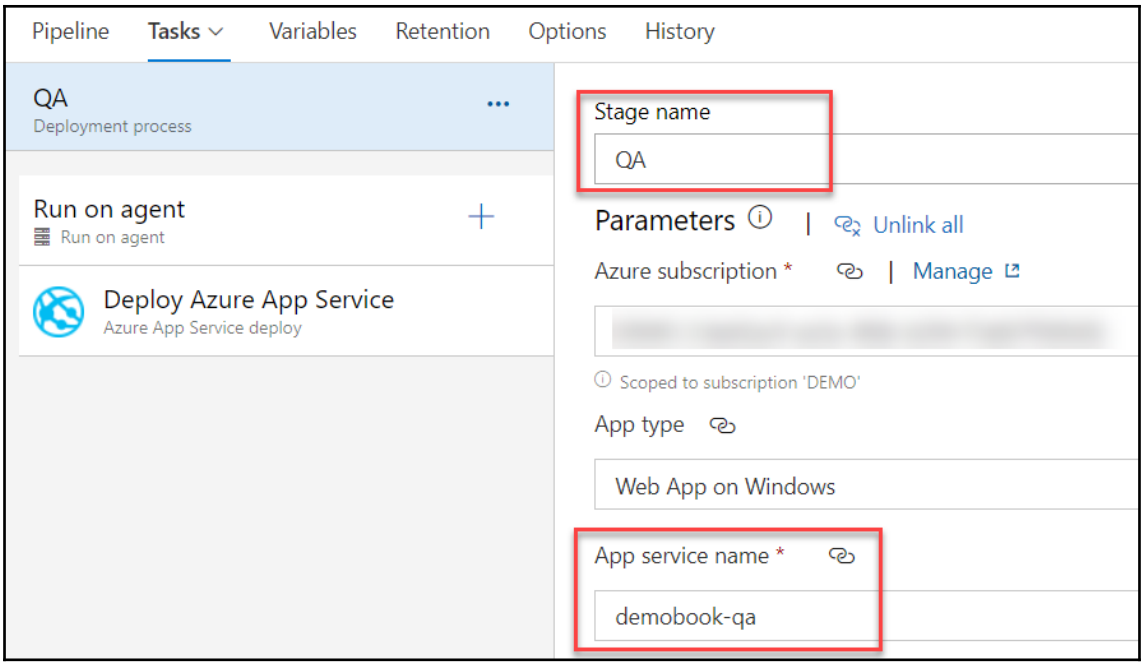

All pipelines
Pipeline
Tasks
Variables
Artifacts
Add
1
Add an artifact
Schedule not set
Add an artifact
Source type
Build
Azure Repos ...
GitHub
TFVC
5 more artifact types
Project *
BookDemo
Source (build pipeline) *
2
BookDemo-ASP.NET Core-CI
Default version *
Latest
Source alias *
_BookDemo-ASP.NET Core-CI
The artifacts published by each version will be available for deployment in release pipelines. The latest successful build of BookDemo-ASP.NET Core-CI published the following artifacts: drop.
Add
3

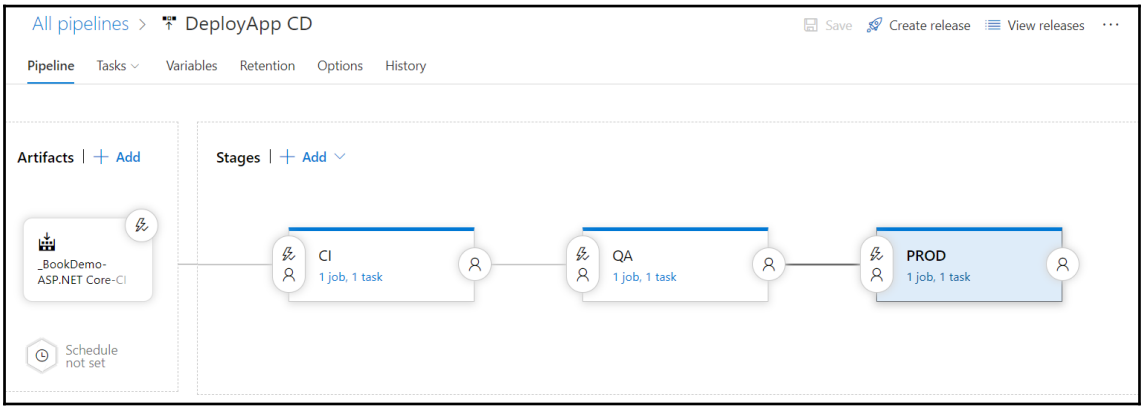

All pipelines > New release pipeline
Save
Create release
Pipeline
Tasks
Variables
Retention
Options
History
Artifacts | Add
_BookDemo-ASP.NET Core-CI
Continuous deployment trigger
Build: _BookDemo-ASP.NET Core-CI
Enabled
Creates a release every time a new build is available.
Build branch filters
No filters added.
Add


All pipelines > New release pipeline
Save
Create release
Pipeline
Tasks
Variables
Retention
Options
History
CI
Deployment process
Run on agent
Run on agent
Deploy Azure App Service
Azure App Service Deploy
Stage name
CI
Parameters
Unlink all
Azure subscription *
Manage
Scoped to subscription 'DEMO'
This field is linked to 1 setting in 'Deploy Azure App Service'
App type
Web App on Windows
App service name *
demobook-ci

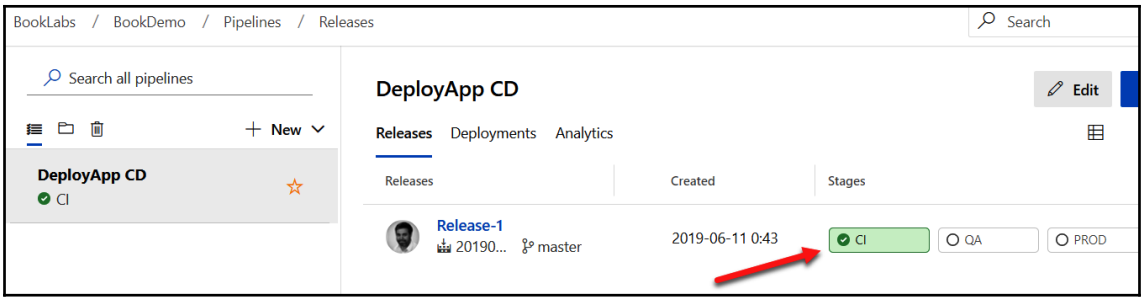

BookLabs / BookDemo / Pipelines
Edit pipeline name
Search
All pipelines > DeployApp CD
1
Save
2
Create
Pipeline
Tasks
Variables
Retention
Options
History
CI
Deployment process
Run on agent
Run on agent
Stage name
CI
Parameters
Unlink all

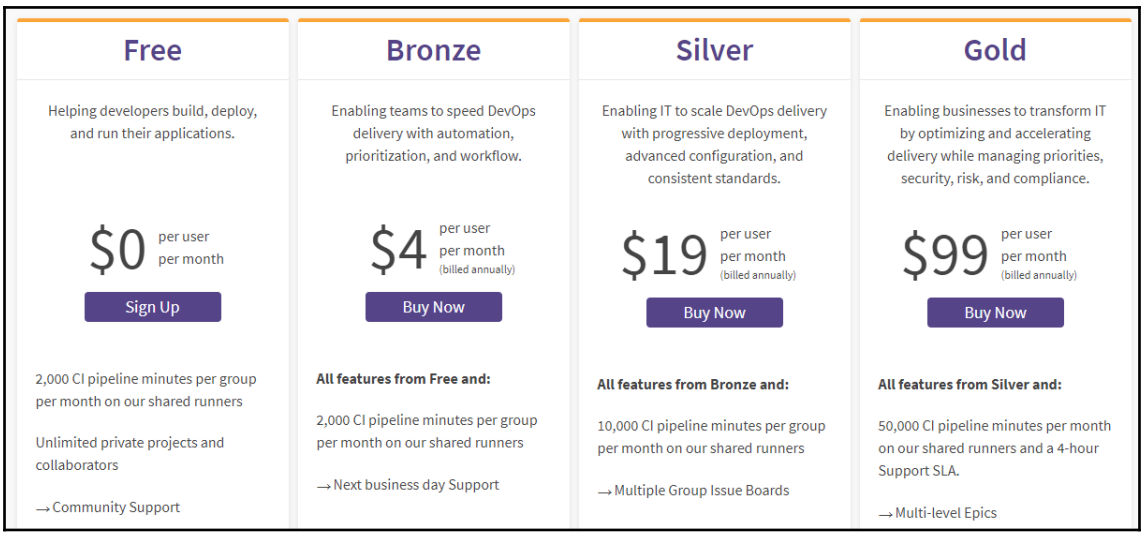

All pipelines > DeployApp CD
Pipeline
Tasks
Variables
Retention
Options
History
Artifacts
Add
_BookDemo-
ASP.NET Core-CI
Schedule
not set
Stages
Add
CI
1 job, 1 task
Clone

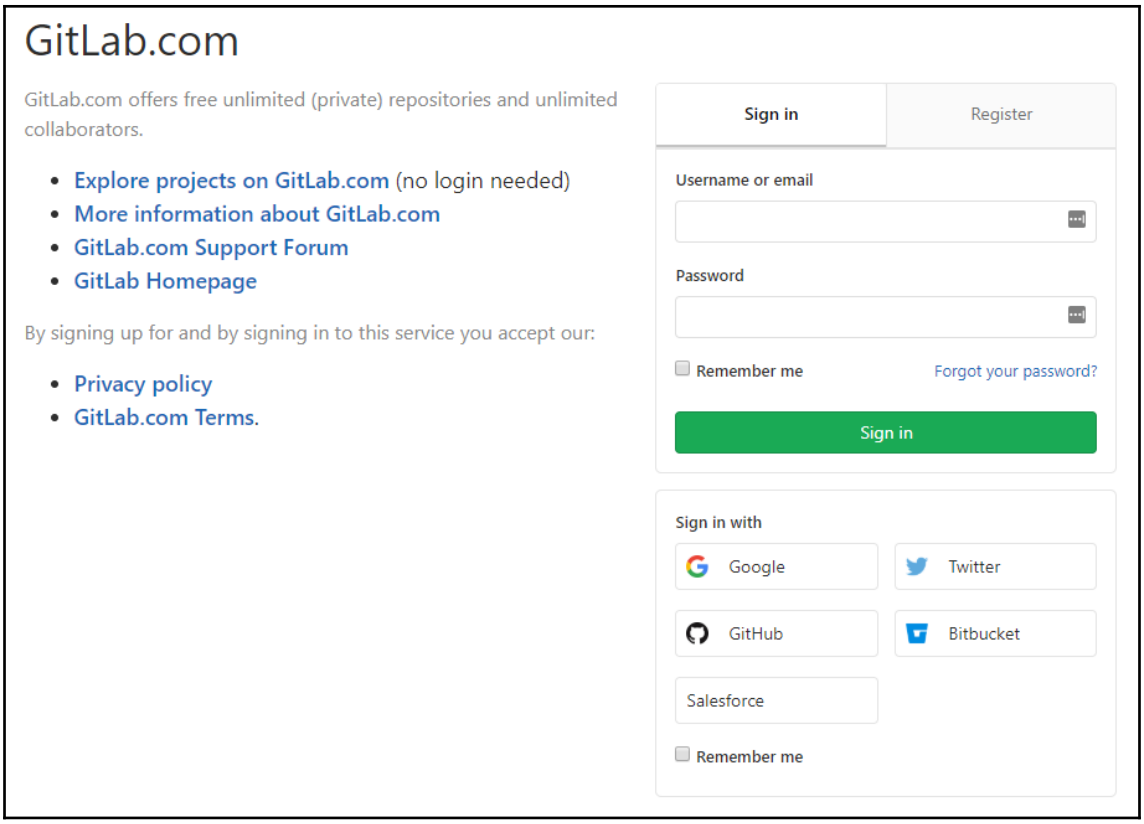

Pipeline
Tasks
Variables
Retention
Options
History
QA
Deployment process
Run on agent
Run on agent
Deploy Azure App Service
Azure App Service deploy
Stage name
QA
Parameters
Unlink all
Azure subscription *
Manage
Scoped to subscription 'DEMO'
App type
Web App on Windows
App service name *
demobook-qa

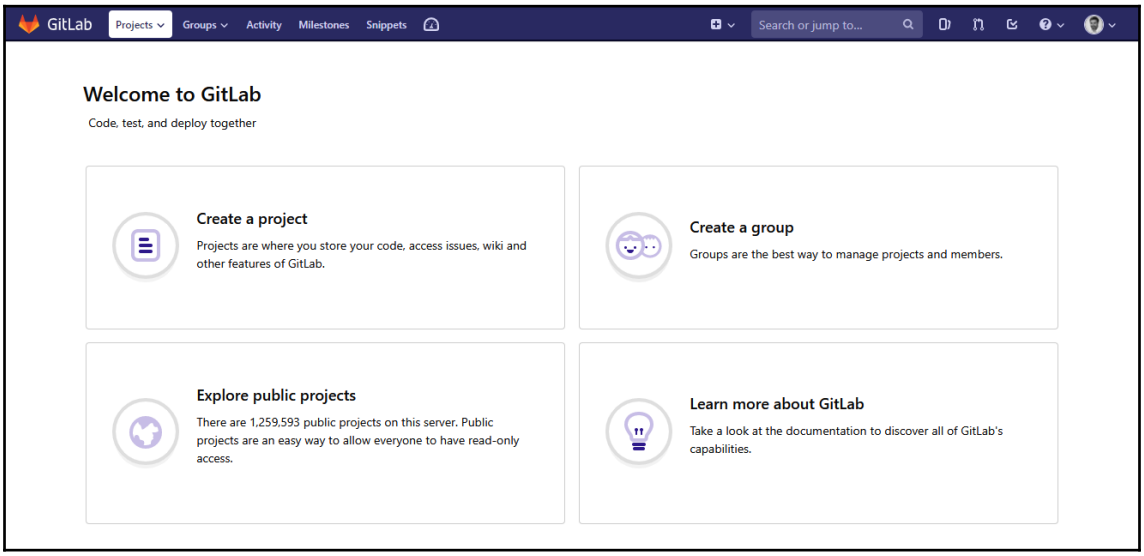

All pipelines
DeployApp CD
Save
Create release
View releases
Pipeline
Tasks
Variables
Retention
Options
History
Artifacts
Add
Stages
Add
_BookDemo-ASP.NET Core-CI
Schedule not set
CI
1 job, 1 task
QA
1 job, 1 task
PROD
1 job, 1 task

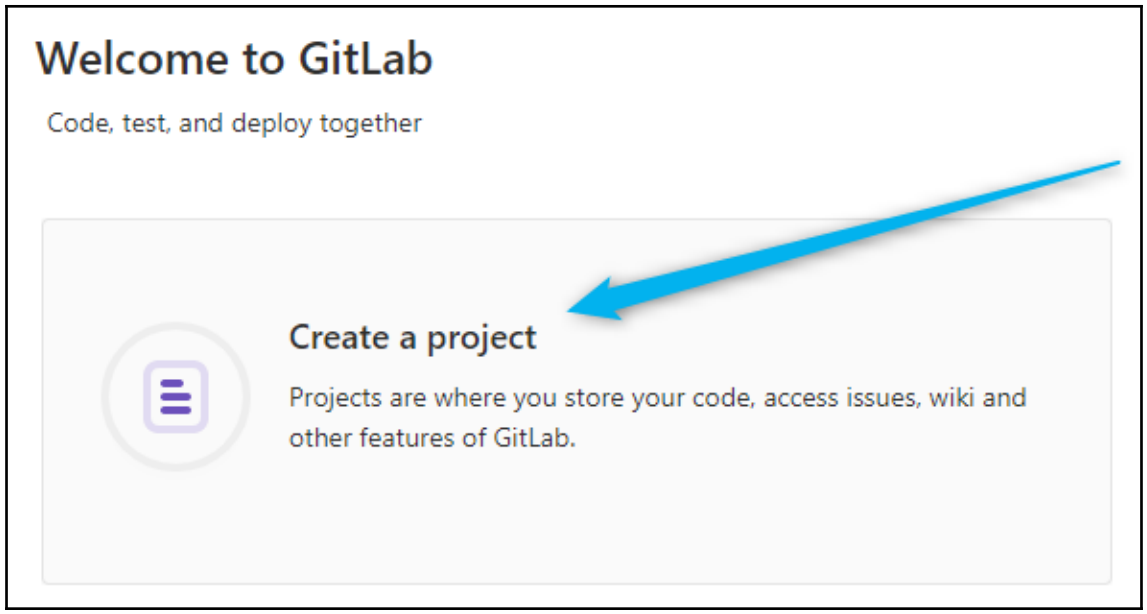
All pipelines
DeployApp CD
Create release
View releases
Pipeline
Tasks
Variables
Retention
Options
History
Artifacts
Add
Stages
Add

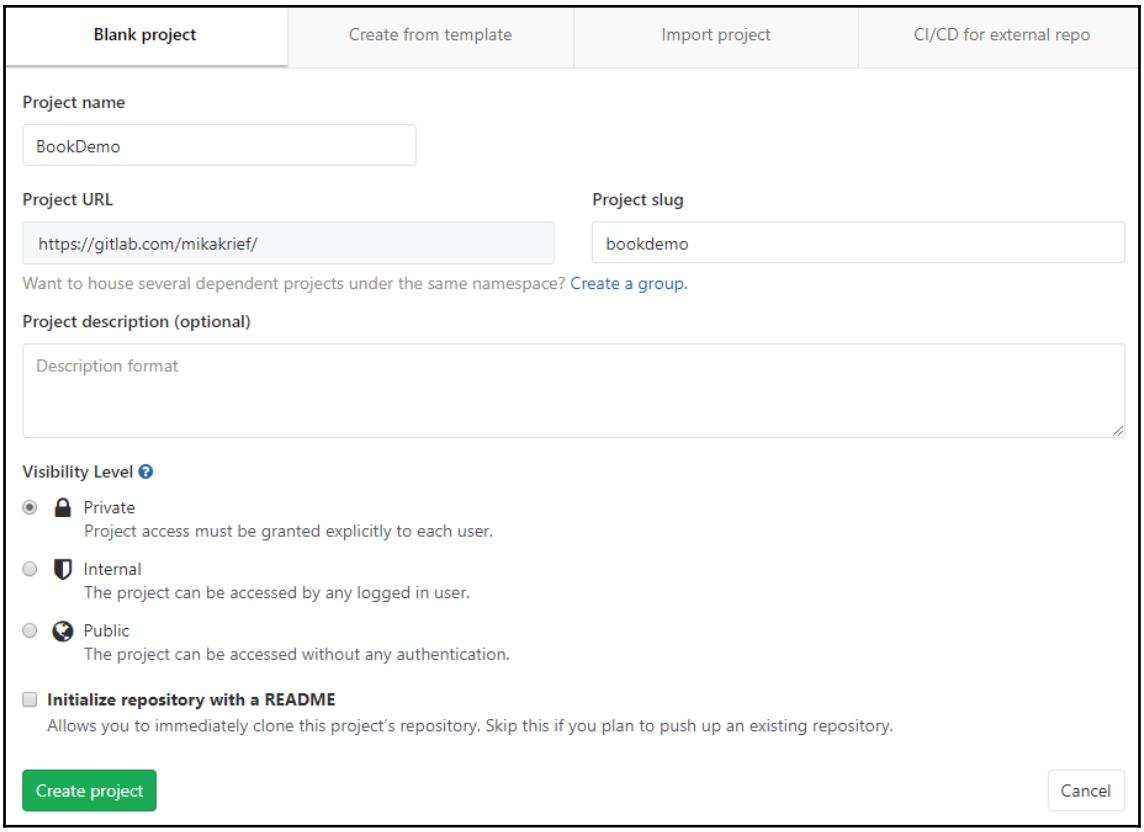

BookLabs / BookDemo / Pipelines / Releases
Search
Search all pipelines
New
DeployApp CD
CI
DeployApp CD
Edit
Releases
Deployments
Analytics
Releases
Created
Stages
Release-1
20190...
master
2019-06-11 0:43
CI
QA
PROD

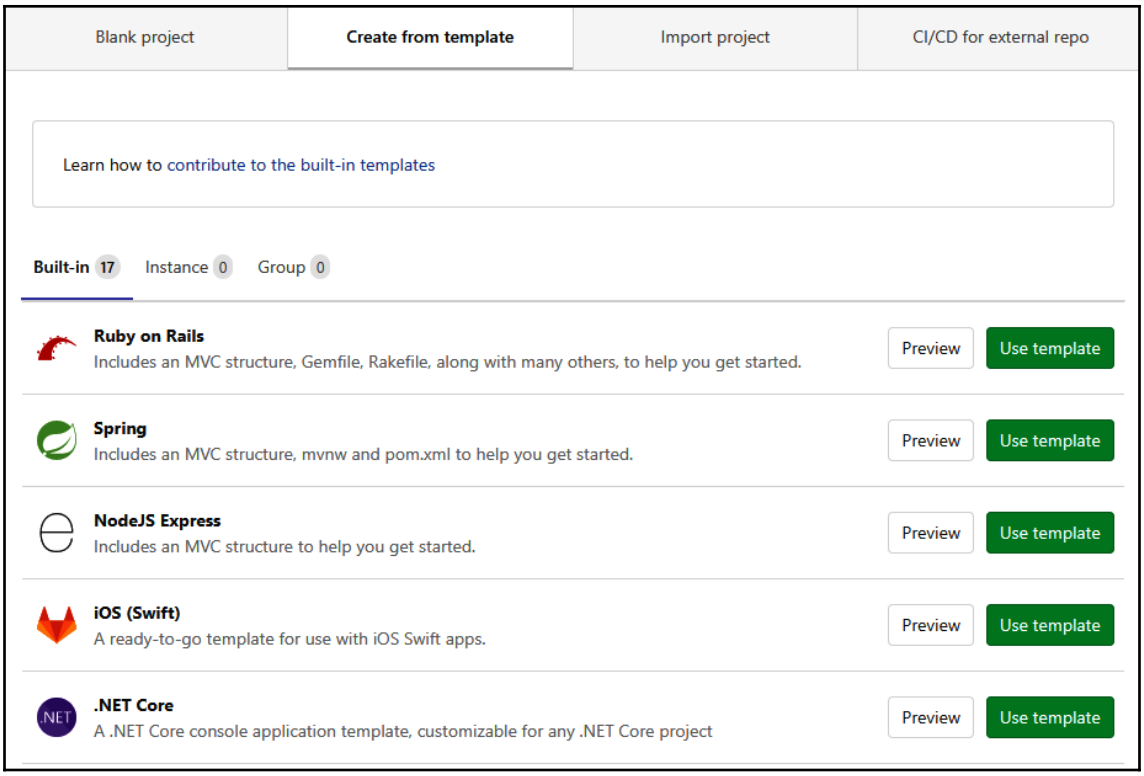

Free
Helping developers build, deploy, and run their applications.
$0
per user per month
Sign Up
2,000 CI pipeline minutes per group per month on our shared runners
Unlimited private projects and collaborators
→ Community Support
Bronze
Enabling teams to speed DevOps delivery with automation, prioritization, and workflow.
$4
per user per month
(billed annually)
Buy Now
All features from Free and:
2,000 CI pipeline minutes per group per month on our shared runners
→ Next business day Support
Silver
Enabling IT to scale DevOps delivery with progressive deployment, advanced configuration, and consistent standards.
$19
per user per month
(billed annually)
Buy Now
All features from Bronze and:
10,000 CI pipeline minutes per group per month on our shared runners
→ Multiple Group Issue Boards
Gold
Enabling businesses to transform IT by optimizing and accelerating delivery while managing priorities, security, risk, and compliance.
$99
per user per month
(billed annually)
Buy Now
All features from Silver and:
50,000 CI pipeline minutes per month on our shared runners and a 4-hour Support SLA.
→ Multi-level Epics

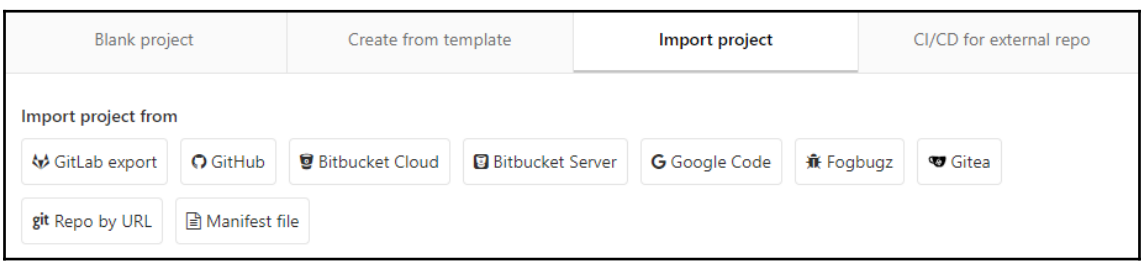

GitLab.com
GitLab.com offers free unlimited (private) repositories and unlimited collaborators.
Explore projects on GitLab.com (no login needed)
More information about GitLab.com
GitLab.com Support Forum
GitLab Homepage
By signing up for and by signing in to this service you accept our:
Privacy policy
GitLab.com Terms.
Sign in
Register
Username or email
Password
Remember me
Forgot your password?
Sign in
Sign in with
Google
Twitter
GitHub
Bitbucket
Salesforce
Remember me


GitLab
Projects
Groups
Activity
Milestones
Snippets
Search or jump to...
Welcome to GitLab
Code, test, and deploy together
Create a project
Projects are where you store your code, access issues, wiki and other features of GitLab.
Create a group
Groups are the best way to manage projects and members.
Explore public projects
There are 1,259,593 public projects on this server. Public projects are an easy way to allow everyone to have read-only access.
Learn more about GitLab
Take a look at the documentation to discover all of GitLab's capabilities.


Welcome to GitLab
Code, test, and deploy together
Create a project
Projects are where you store your code, access issues, wiki and other features of GitLab.


Blank project
Create from template
Import project
CI/CD for external repo
Project name
BookDemo
Project URL
https://gitlab.com/mikakrief/
Project slug
bookdemo
Want to house several dependent projects under the same namespace? Create a group.
Project description (optional)
Description format
Visibility Level
Private
Project access must be granted explicitly to each user.
Internal
The project can be accessed by any logged in user.
Public
The project can be accessed without any authentication.
Initialize repository with a README
Allows you to immediately clone this project's repository. Skip this if you plan to push up an existing repository.
Create project
Cancel


Blank project
Create from template
Import project
CI/CD for external repo
Learn how to contribute to the built-in templates
Built-in 17
Instance 0
Group 0
Ruby on Rails
Includes an MVC structure, Gemfile, Rakefile, along with many others, to help you get started.
Preview
Use template
Spring
Includes an MVC structure, mvnw and pom.xml to help you get started.
Preview
Use template
NodeJS Express
Includes an MVC structure to help you get started.
Preview
Use template
iOS (Swift)
A ready-to-go template for use with iOS Swift apps.
Preview
Use template
.NET Core
A .NET Core console application template, customizable for any .NET Core project
Preview
Use template


Blank project
Create from template
Import project
CI/CD for external repo
Import project from
GitLab export
GitHub
Bitbucket Cloud
Bitbucket Server
Google Code
Fogbugz
Gitea
Repo by URL
Manifest file

Blank project | Create from template | Import project | **CI/CD for external repo**

Run CI/CD pipelines for external repositories

Connect your external repositories, and CI/CD pipelines will run for new commits. A GitLab project will be created with only CI/CD features enabled.

If using GitHub, you'll see pipeline statuses on GitHub for your commits and pull requests. More info

Connect repositories from

GitHub | git Repo by URL

B

BookDemo
Project ID: 12804986

Star 0 | Fork 0 | Clone

Add license | **1** Commit | **1** Branch | **0** Tags | **911 KB** Files

Auto DevOps

It will automatically build, test, and deploy your application based on a predefined CI/CD configuration.

Learn more in the Auto DevOps documentation

Enable in settings

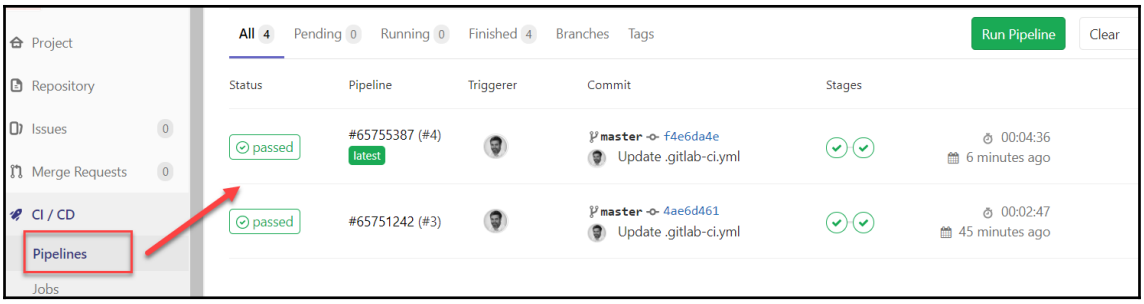
master | bookdemo / + | History | Find file | Web IDE

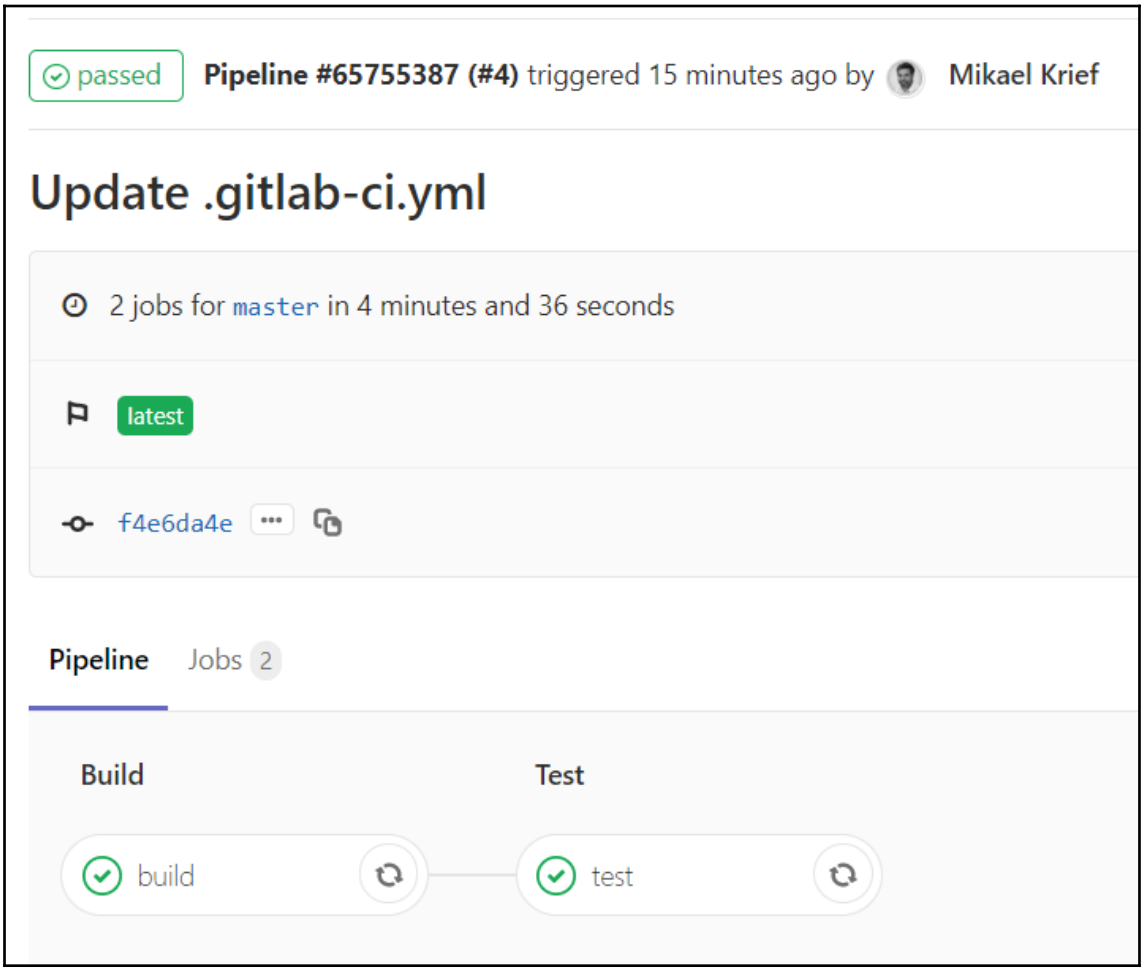
Initial commit
Mikael KRIEF authored 8 minutes ago

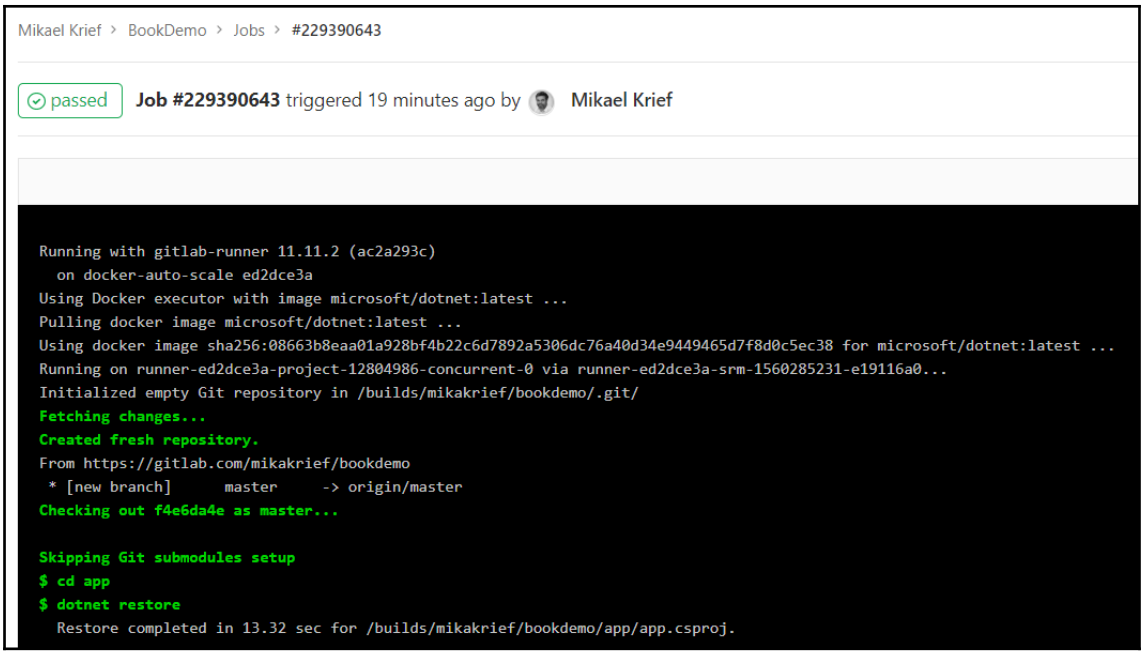
dfe2ed2f

Add README | Add CHANGELOG | Add CONTRIBUTING | Add Kubernetes cluster | Set up CI/CD

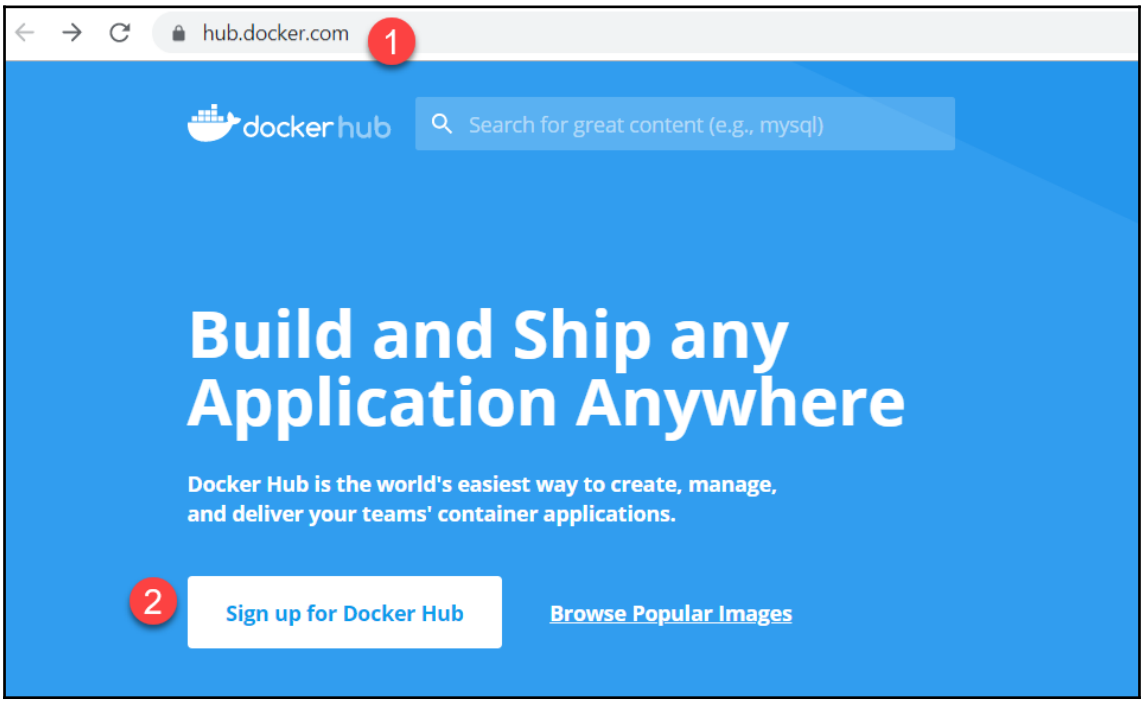
Name	Last commit	Last update
app	Initial commit	8 minutes ago
tests	Initial commit	8 minutes ago

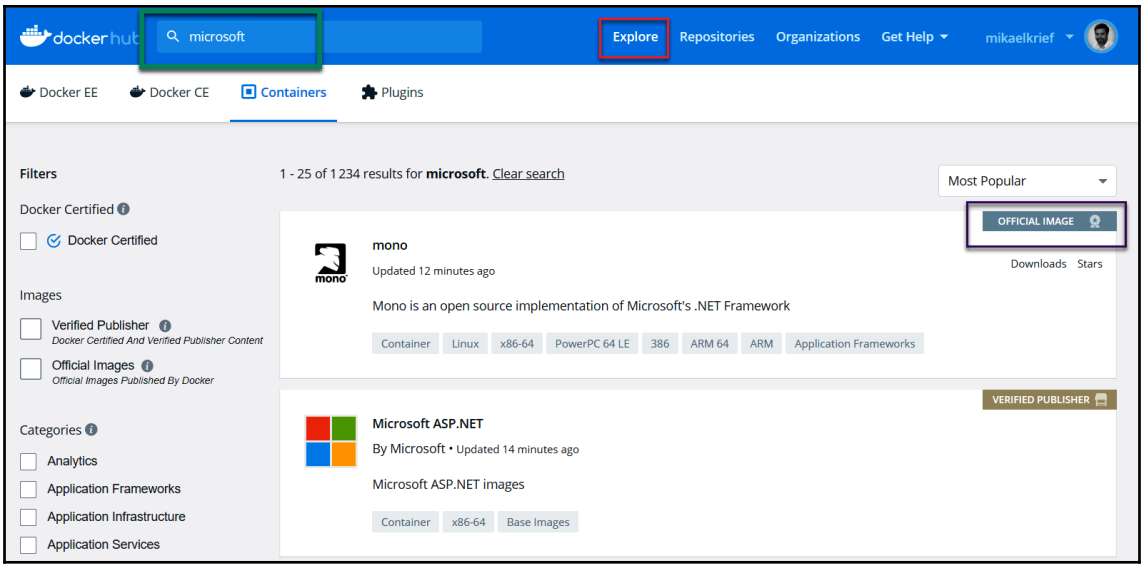

Project
Repository
Issues 0
Merge Requests 0
CI / CD
Pipelines
Jobs
All 4
Pending 0
Running 0
Finished 4
Branches
Tags
Run Pipeline
Clear
Status
Pipeline
Triggerer
Commit
Stages
passed
#65755387 (#4)
latest
master f4e6da4e
Update .gitlab-ci.yml
00:04:36
6 minutes ago
passed
#65751242 (#3)
master 4ae6d461
Update .gitlab-ci.yml
00:02:47
45 minutes ago

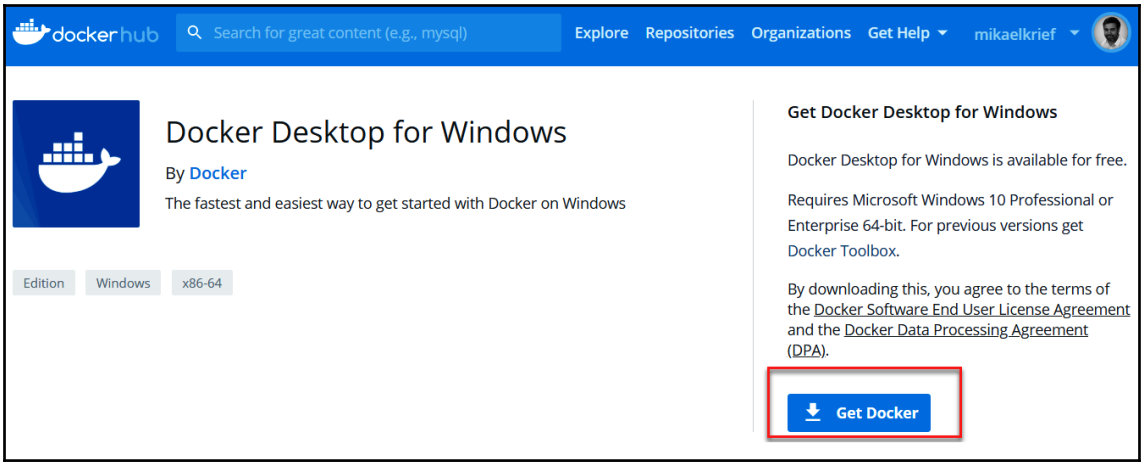

passed
Pipeline #65755387 (#4) triggered 15 minutes ago by Mikael Krief
Update .gitlab-ci.yml
2 jobs for master in 4 minutes and 36 seconds
latest
f4e6da4e
Pipeline
Jobs 2
Build
Test
build
test

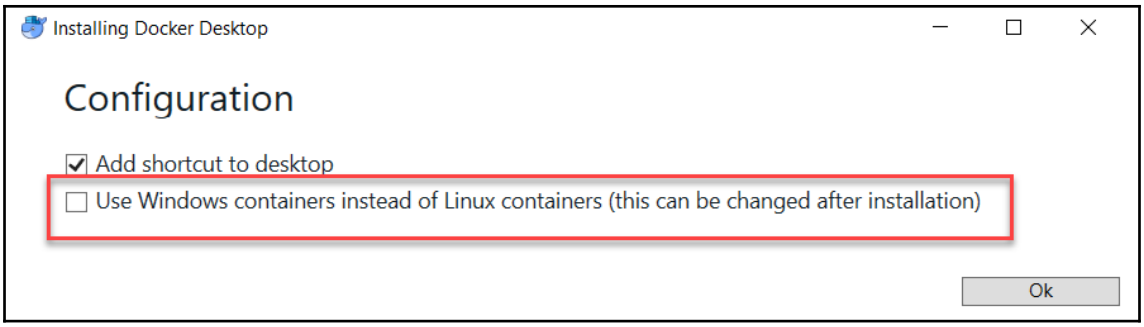

Mikael Krief › BookDemo › Jobs › #229390643
passed
Job #229390643 triggered 19 minutes ago by Mikael Krief
Running with gitlab-runner 11.11.2 (ac2a293c)
on docker-auto-scale ed2dce3a
Using Docker executor with image microsoft/dotnet:latest ...
Pulling docker image microsoft/dotnet:latest ...
Using docker image sha256:08663b8eaa01a928bf4b22c6d7892a5306dc76a40d34e9449465d7f8d0c5ec38 for microsoft/dotnet:latest ...
Running on runner-ed2dce3a-project-12804986-concurrent-0 via runner-ed2dce3a-srm-1560285231-e19116a0...
Initialized empty Git repository in /builds/mikakrief/bookdemo/.git/
Fetching changes...
Created fresh repository.
From https://gitlab.com/mikakrief/bookdemo
* [new branch] master -> origin/master
Checking out f4e6da4e as master...
Skipping Git submodules setup
$ cd app
$ dotnet restore
Restore completed in 13.32 sec for /builds/mikakrief/bookdemo/app/app.csproj.

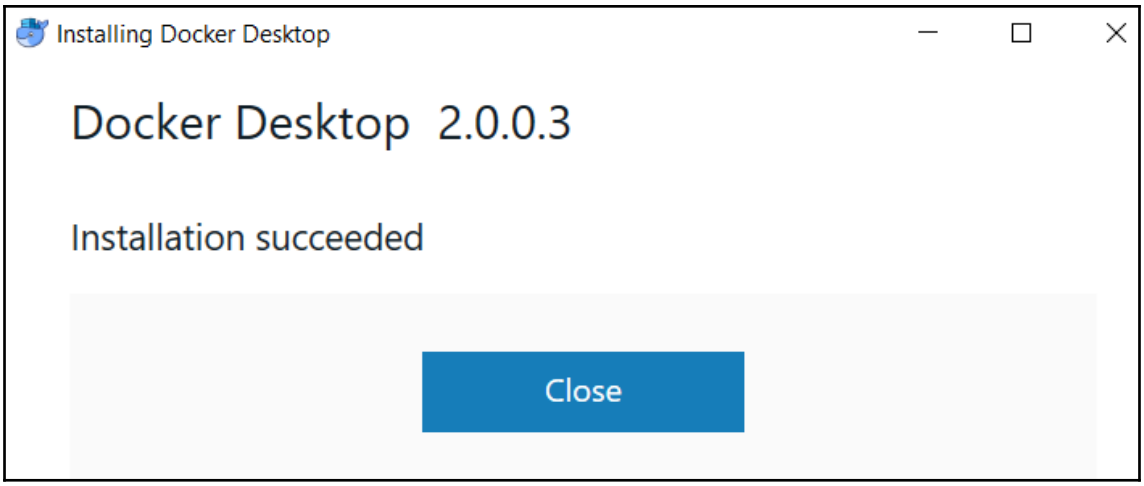
Chapter 7: Containerizing Your Application with Docker

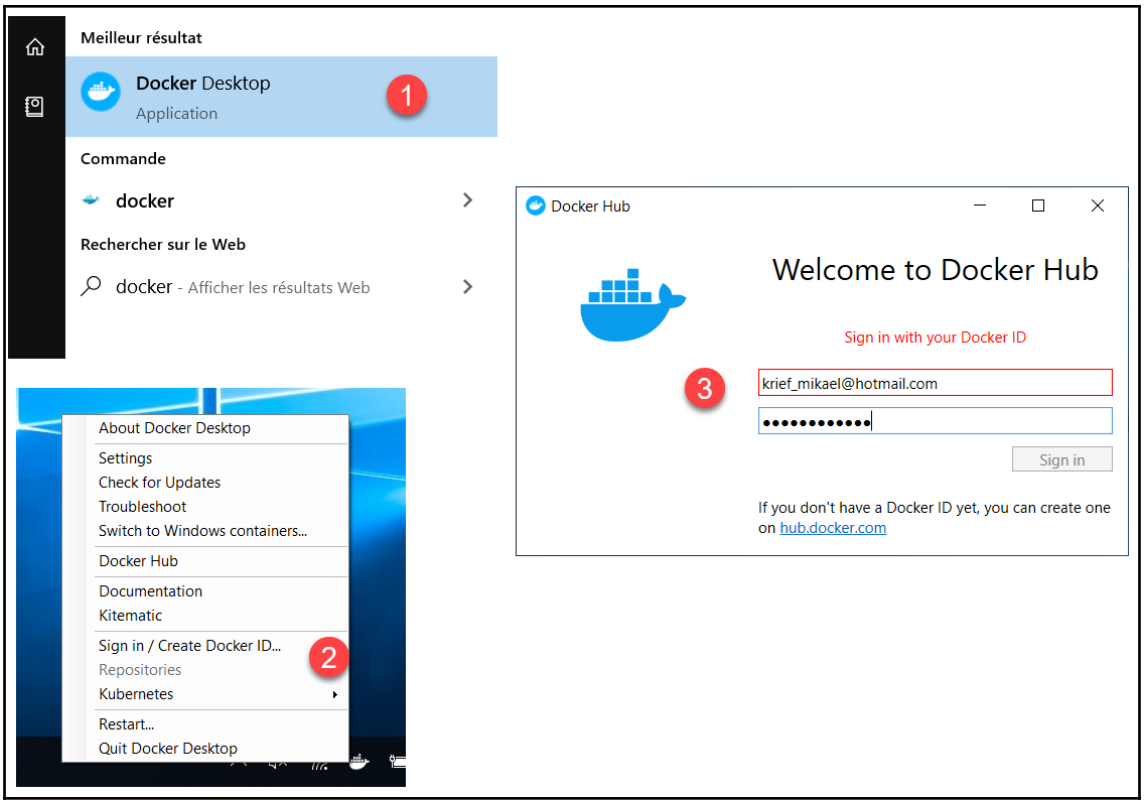


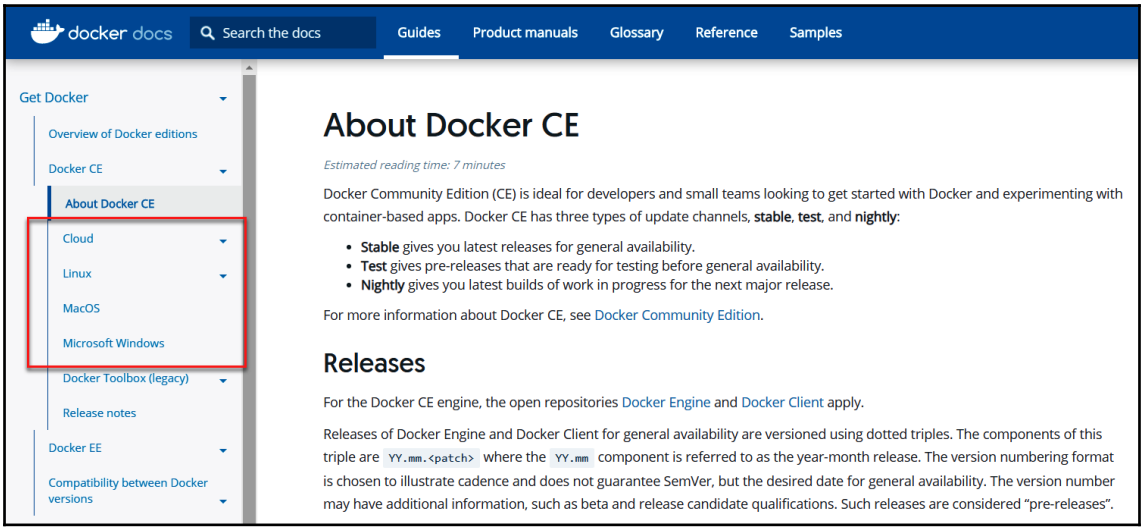

docker hub
microsoft
Explore
Repositories
Organizations
Get Help
mikaelkrief
Docker EE
Docker CE
Containers
Plugins
Filters
1 - 25 of 1 234 results for microsoft. Clear search
Most Popular
Docker Certified
Docker Certified
Images
Verified Publisher
Docker Certified And Verified Publisher Content
Official Images
Official Images Published By Docker
Categories
Analytics
Application Frameworks
Application Infrastructure
Application Services
OFFICIAL IMAGE
mono
Updated 12 minutes ago
Downloads
Stars
Mono is an open source implementation of Microsoft's .NET Framework
Container
Linux
x86-64
PowerPC 64 LE
386
ARM 64
ARM
Application Frameworks
VERIFIED PUBLISHER
Microsoft ASP.NET
By Microsoft • Updated 14 minutes ago
Microsoft ASP.NET images
Container
x86-64
Base Images

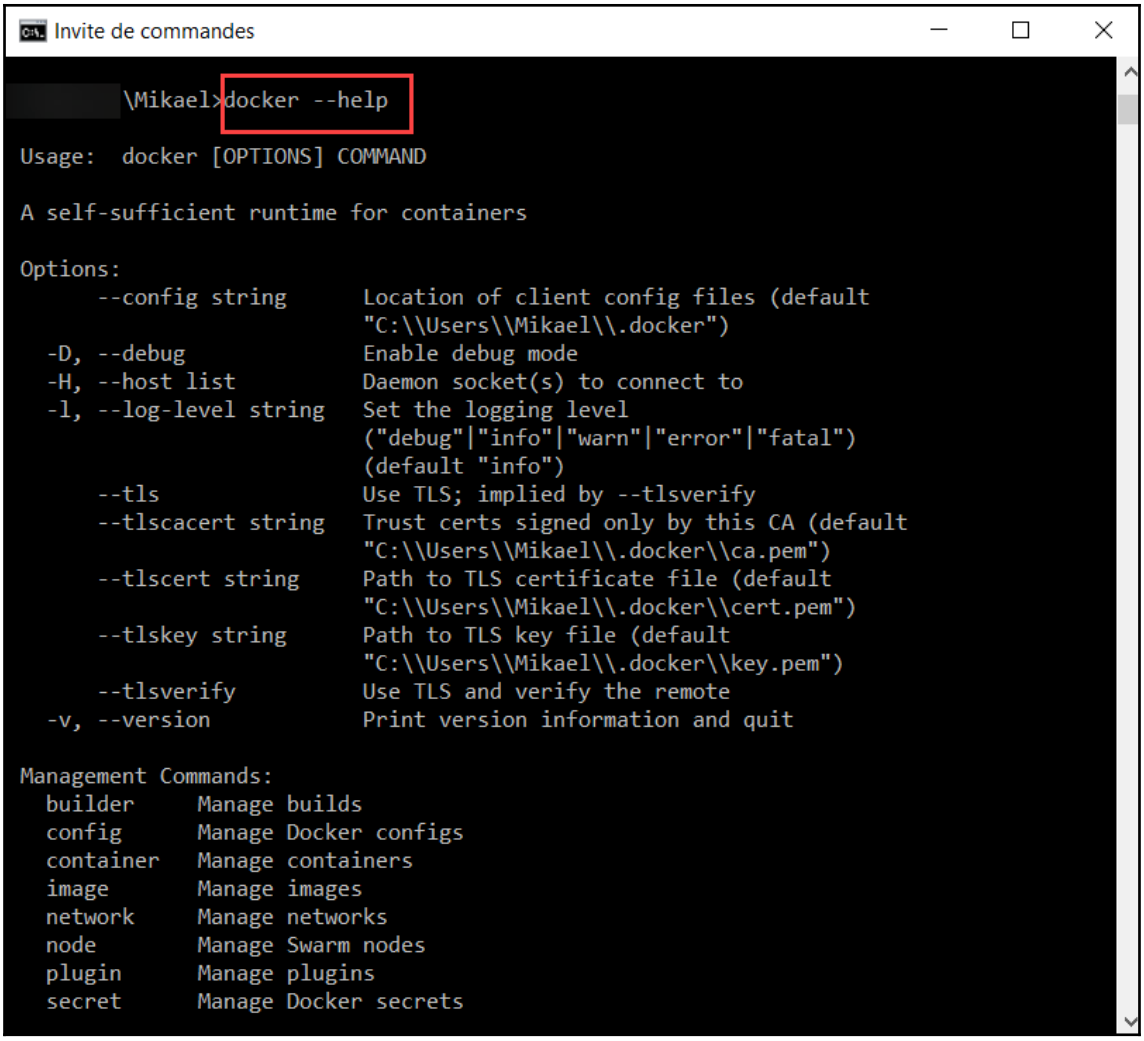

docker hub
Search for great content (e.g., mysql)
Explore
Repositories
Organizations
Get Help
mikaelkrief
Docker Desktop for Windows
By Docker
The fastest and easiest way to get started with Docker on Windows
Edition
Windows
x86-64
Get Docker Desktop for Windows
Docker Desktop for Windows is available for free.
Requires Microsoft Windows 10 Professional or Enterprise 64-bit. For previous versions get Docker Toolbox.
By downloading this, you agree to the terms of the Docker Software End User License Agreement and the Docker Data Processing Agreement (DPA).
Get Docker

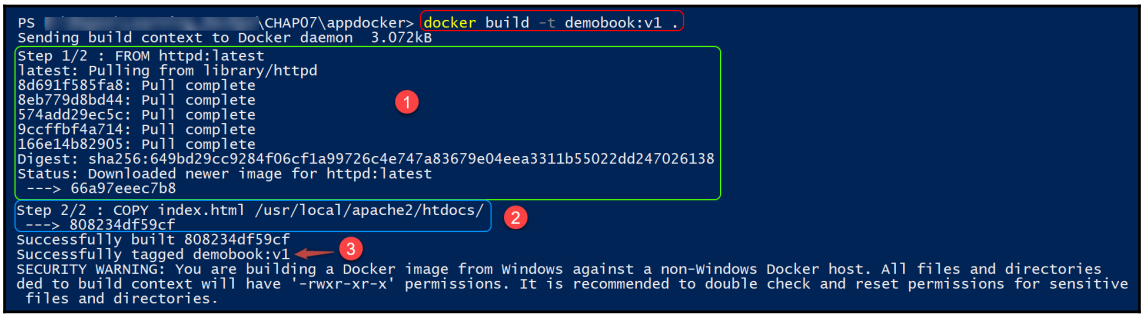

Installing Docker Desktop
Configuration
Add shortcut to desktop
Use Windows containers instead of Linux containers (this can be changed after installation)
Ok


Installing Docker Desktop
Docker Desktop 2.0.0.3
Installation succeeded
Close


Meilleur résultat
Docker Desktop
Application
1
Commande
docker
Rechercher sur le Web
docker - Afficher les résultats Web
About Docker Desktop
Settings
Check for Updates
Troubleshoot
Switch to Windows containers...
Docker Hub
Documentation
Kitematic
Sign in / Create Docker ID...
2
Repositories
Kubernetes
Restart...
Quit Docker Desktop
Docker Hub
Welcome to Docker Hub
Sign in with your Docker ID
3
krief_mikael@hotmail.com
Sign in
If you don't have a Docker ID yet, you can create one on hub.docker.com


docker docs
Search the docs
Guides
Product manuals
Glossary
Reference
Samples
Get Docker
Overview of Docker editions
Docker CE
About Docker CE
Cloud
Linux
MacOS
Microsoft Windows
Docker Toolbox (legacy)
Release notes
Docker EE
Compatibility between Docker versions
About Docker CE
Estimated reading time: 7 minutes
Docker Community Edition (CE) is ideal for developers and small teams looking to get started with Docker and experimenting with container-based apps. Docker CE has three types of update channels, stable, test, and nightly:
Stable gives you latest releases for general availability.
Test gives pre-releases that are ready for testing before general availability.
Nightly gives you latest builds of work in progress for the next major release.
For more information about Docker CE, see Docker Community Edition.
Releases
For the Docker CE engine, the open repositories Docker Engine and Docker Client apply.
Releases of Docker Engine and Docker Client for general availability are versioned using dotted triples. The components of this triple are YY.mm.<patch> where the YY.mm component is referred to as the year-month release. The version numbering format is chosen to illustrate cadence and does not guarantee SemVer, but the desired date for general availability. The version number may have additional information, such as beta and release candidate qualifications. Such releases are considered “pre-releases”.

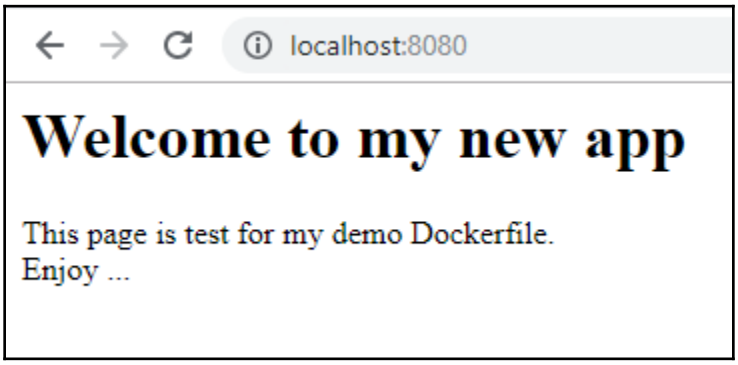

Invite de commandes
\Mikael>docker --help
Usage: docker [OPTIONS] COMMAND
A self-sufficient runtime for containers
Options:
--config string Location of client config files (default "C:\\Users\\Mikael\\.docker")
-D, --debug Enable debug mode
-H, --host list Daemon socket(s) to connect to
-l, --log-level string Set the logging level ("debug"|"info"|"warn"|"error"|"fatal") (default "info")
--tls Use TLS; implied by --tlsverify
--tlscacert string Trust certs signed only by this CA (default "C:\\Users\\Mikael\\.docker\\ca.pem")
--tlscert string Path to TLS certificate file (default "C:\\Users\\Mikael\\.docker\\cert.pem")
--tlskey string Path to TLS key file (default "C:\\Users\\Mikael\\.docker\\key.pem")
--tlsverify Use TLS and verify the remote
-v, --version Print version information and quit
Management Commands:
builder Manage builds
config Manage Docker configs
container Manage containers
image Manage images
network Manage networks
node Manage Swarm nodes
plugin Manage plugins
secret Manage Docker secrets


PS \CHAP07\appdocker> docker build -t demobook:v1 .
Sending build context to Docker daemon 3.072kB
Step 1/2 : FROM httpd:latest
latest: Pulling from library/httpd
8d691f585fa8: Pull complete
8eb779d8bd44: Pull complete
574add29ec5c: Pull complete
9ccffbf4a714: Pull complete
166e14b82905: Pull complete
Digest: sha256:649bd29cc9284f06cf1a99726c4e747a83679e04eea3311b55022dd247026138
Status: Downloaded newer image for httpd:latest
---> 66a97eeec7b8
1
Step 2/2 : COPY index.html /usr/local/apache2/htdocs/
---> 808234df59cf
2
Successfully built 808234df59cf
Successfully tagged demobook:v1
3
SECURITY WARNING: You are building a Docker image from Windows against a non-Windows Docker host. All files and directories
ded to build context will have '-rwxr-xr-x' permissions. It is recommended to double check and reset permissions for sensitive
files and directories.

```
PS [redacted]\Learning_DevOps\CHAP07\appdocker> docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
demobook            v1                  a121d88f6e18        23 minutes ago      140MB
httpd               latest              e77c77f17b46        6 days ago          140MB
```

```
PS [redacted]\Learning_DevOps\CHAP0/\appdocker> docker run -d --name demoapp -p 8080:80 demobook:v1
381b476d62e568f382f251e0834fd8c69f713eb14ea41c95e5cd7004afdbb879
```

```
PS [redacted]\Learning_DevOps\CHAP07\appdocker> docker ps
CONTAINER ID        IMAGE               COMMAND                  CREATED             STATUS              PORTS                    NAMES
381b476d62e5        demobook:v1         "httpd-foreground"       3 minutes ago       Up 3 minutes        0.0.0.0:8080->80/tcp     demoapp
```

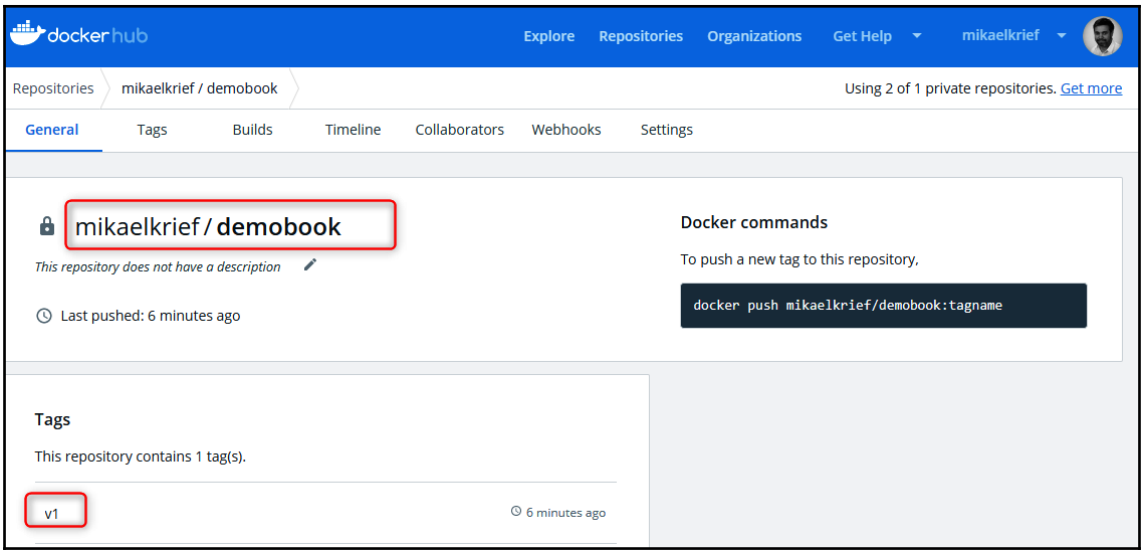


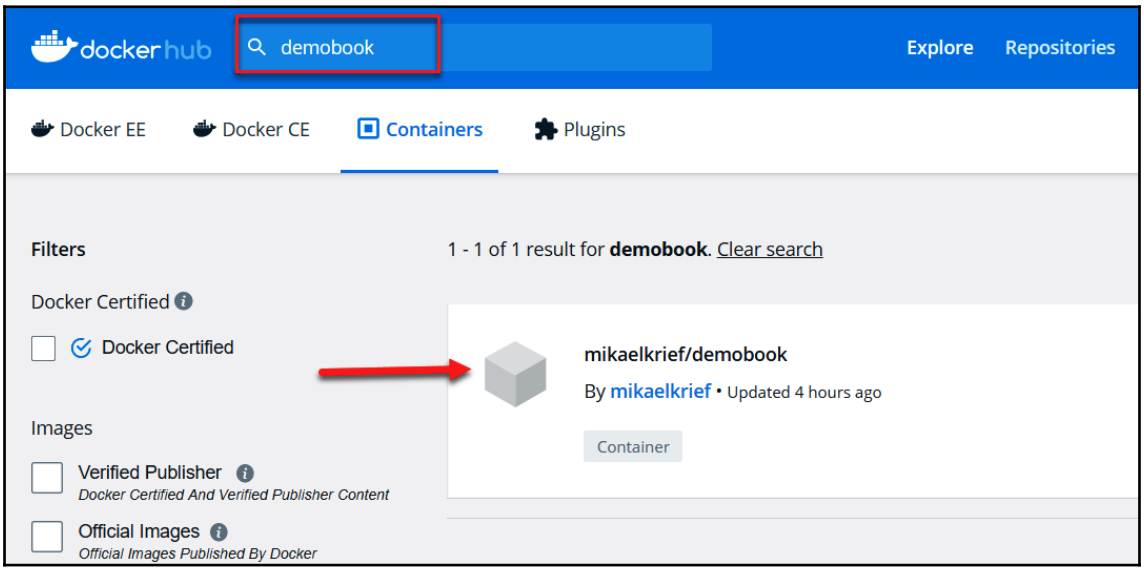

```
PS [redacted]\Learning_DevOps\CHAP07\appdocker> docker login -u mikaelkr[redacted]
Password:
Login Succeeded
```

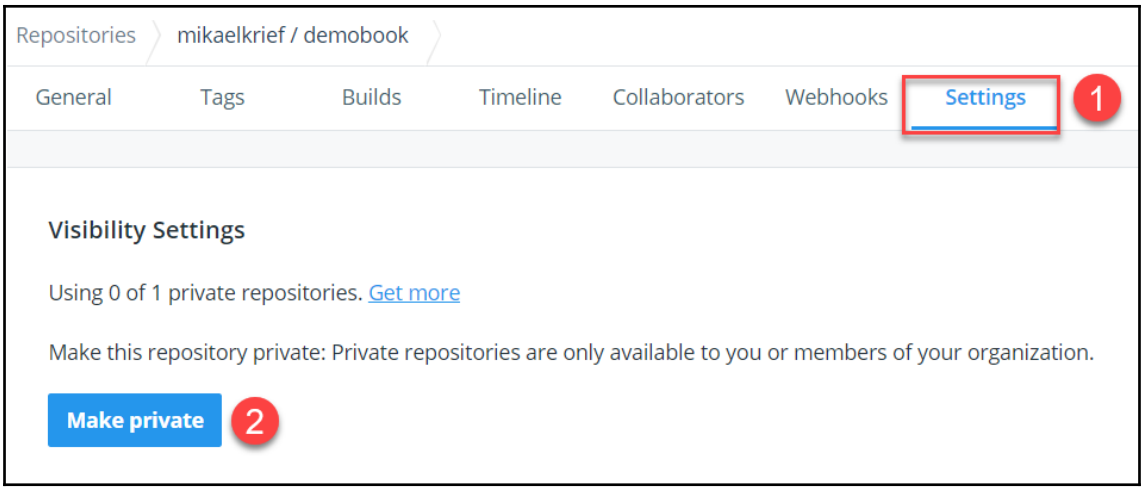
```
PS [redacted]\Learning_DevOps\CHAP07\appdocker> docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
demobook            v1                  a121d88f6e18        6 hours ago         140MB
httpd               latest              e77c77f17b46        6 days ago          140MB
```

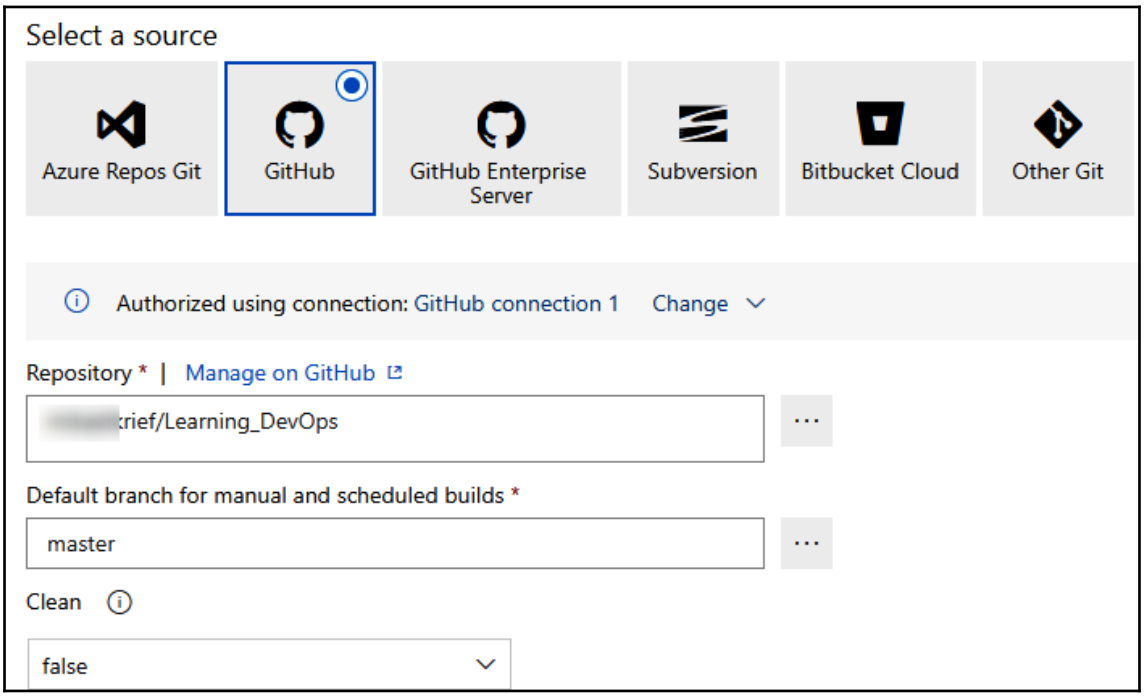
```
PS [redacted]\Learning_DevOps\CHAP07\appdocker> docker tag a121d88f6e18 mikaelkrief/demobook:v1
```

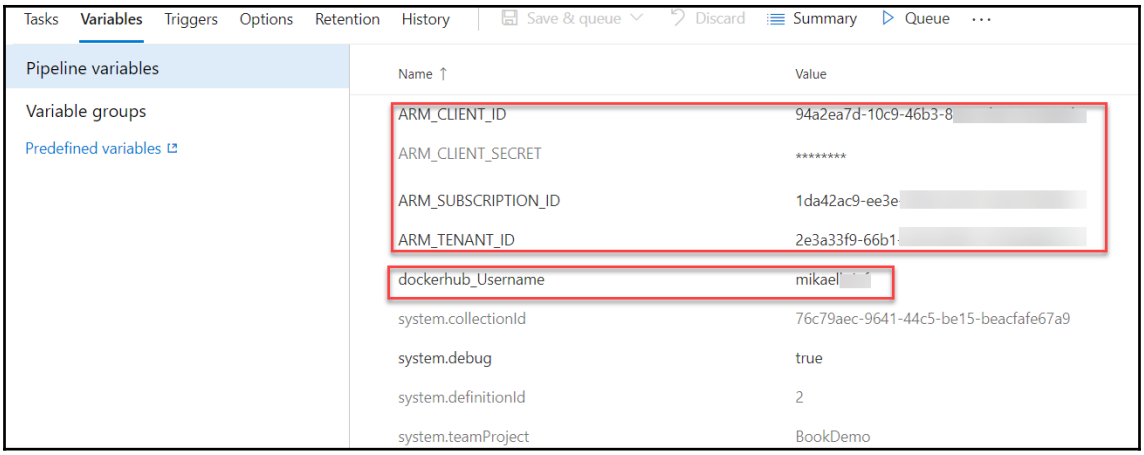
```
PS [redacted]\Learning_DevOps\CHAP07\appdocker> docker push docker.io/mikaelkrief/demobook:v1
The push refers to repository [docker.io/mikaelkrief/demobook]
e5df7a05d9b7: Pushed
6c4a74a82dc9: Mounted from library/httpd
9cba8b480e83: Mounted from library/httpd
25797e1a8e3f: Mounted from library/httpd
d2583584487e: Mounted from library/httpd
cf5b3c6798f7: Mounted from library/httpd
v1: digest: sha256:ffe4e6e67b8bf200a1c86d42a00730491ded2e63279ddbaeb7e7ffdf3b56cd89 size: 1574
```

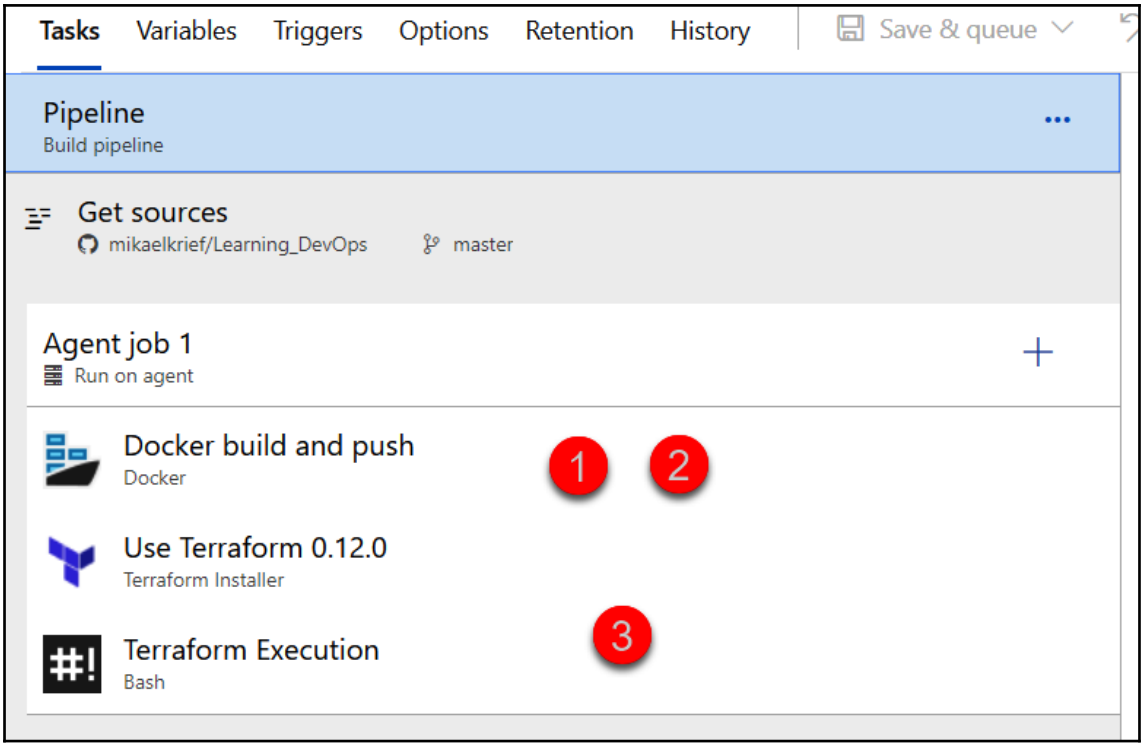

docker hub
Explore
Repositories
Organizations
Get Help
mikaelkrief
Repositories
mikaelkrief / demobook
Using 2 of 1 private repositories. Get more
General
Tags
Builds
Timeline
Collaborators
Webhooks
Settings
mikaelkrief / demobook
This repository does not have a description
Last pushed: 6 minutes ago
Docker commands
To push a new tag to this repository,
docker push mikaelkrief/demobook:tagname
Tags
This repository contains 1 tag(s).
v1
6 minutes ago

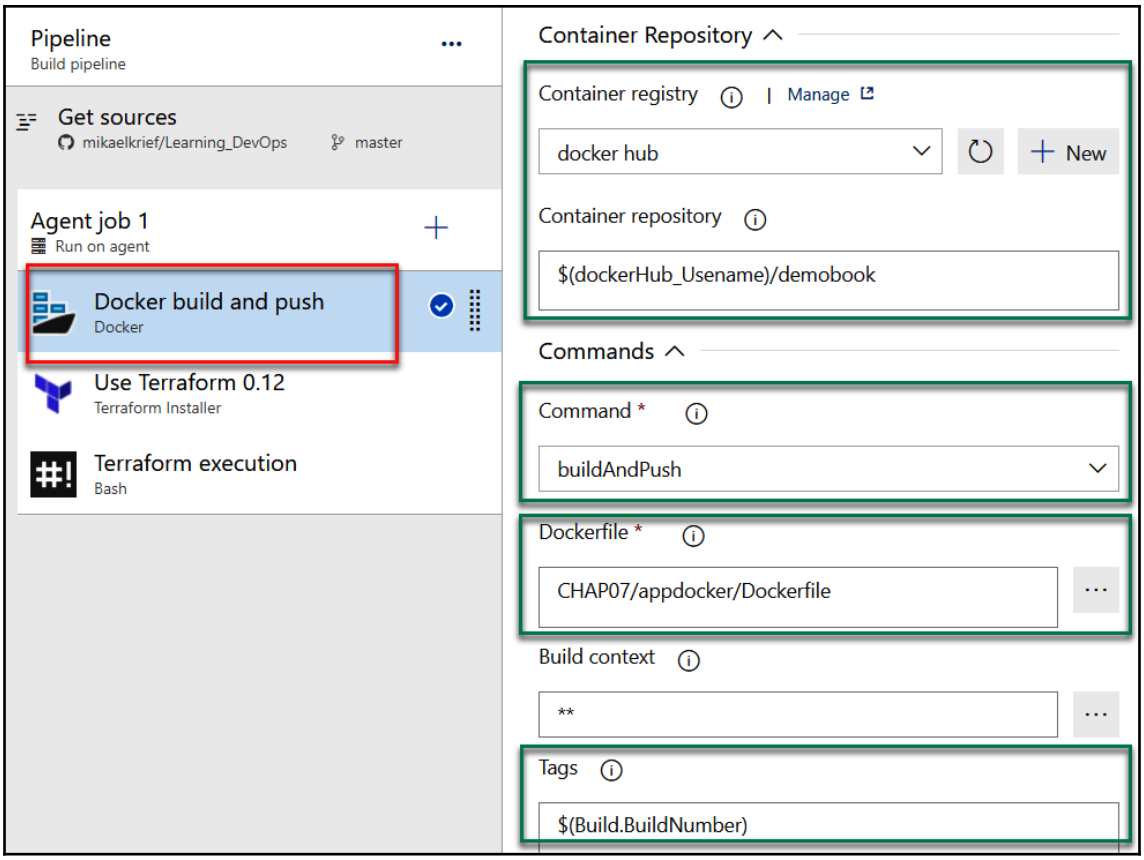

docker hub
demobook
Explore
Repositories
Docker EE
Docker CE
Containers
Plugins
Filters
1 - 1 of 1 result for demobook. Clear search
Docker Certified
Docker Certified
Images
Verified Publisher
Docker Certified And Verified Publisher Content
Official Images
Official Images Published By Docker
mikaelkrief/demobook
By mikaelkrief • Updated 4 hours ago
Container

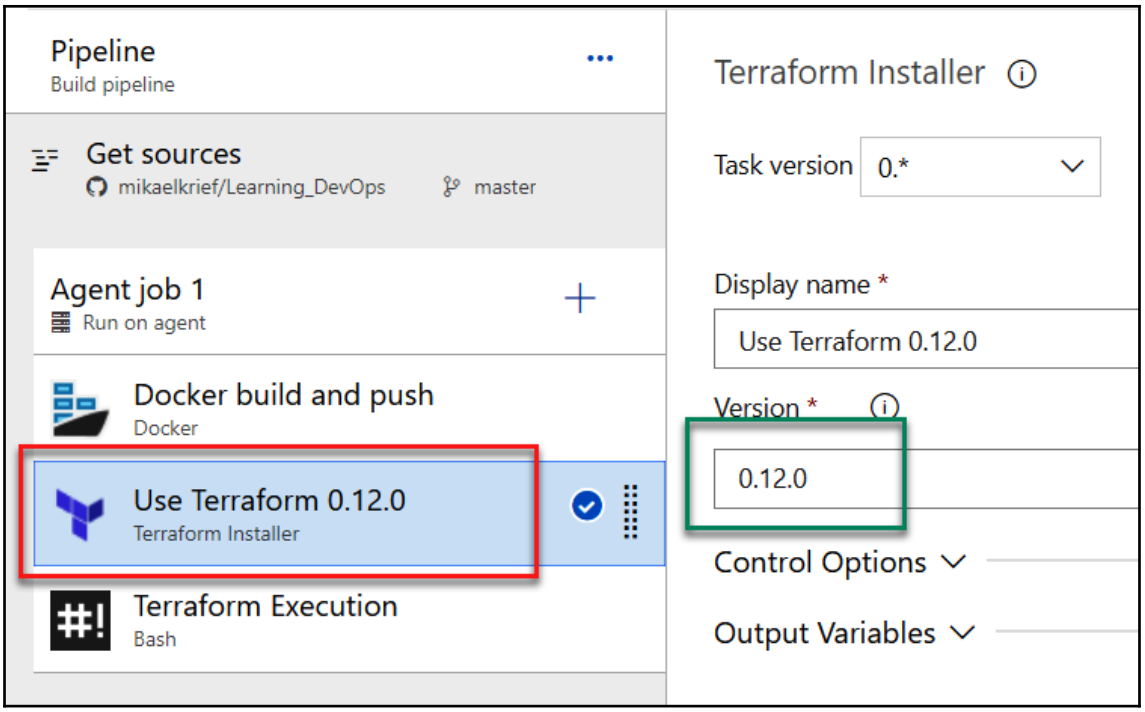

Repositories
mikaelkrief / demobook
General
Tags
Builds
Timeline
Collaborators
Webhooks
Settings
1
Visibility Settings
Using 0 of 1 private repositories. Get more
Make this repository private: Private repositories are only available to you or members of your organization.
Make private
2

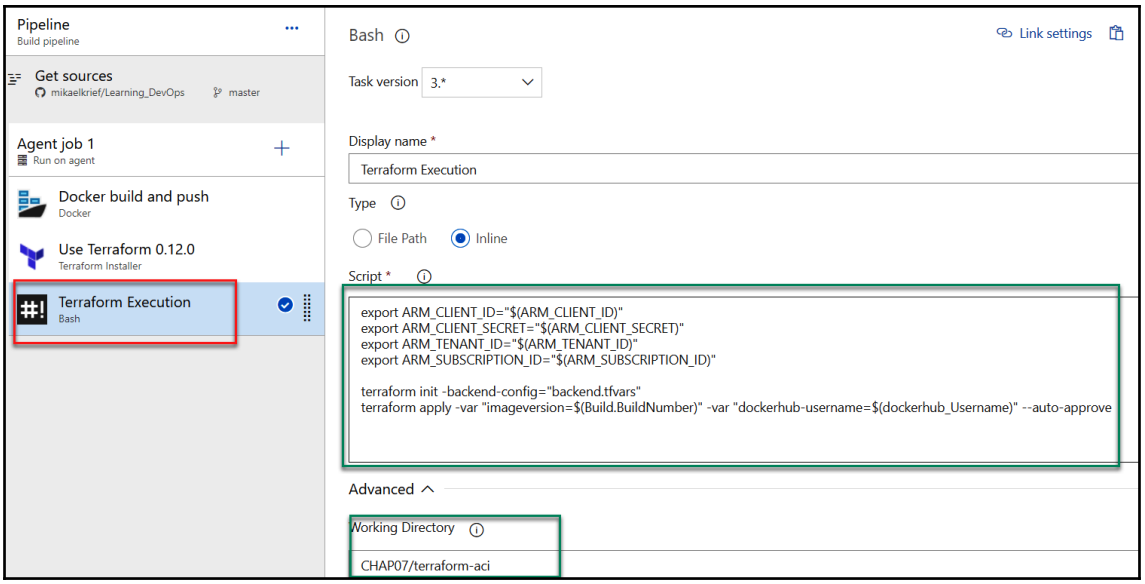

Select a source
Azure Repos Git
GitHub
GitHub Enterprise Server
Subversion
Bitbucket Cloud
Other Git
Authorized using connection: GitHub connection 1
Change
Repository * | Manage on GitHub
rief/Learning_DevOps
Default branch for manual and scheduled builds *
master
Clean
false

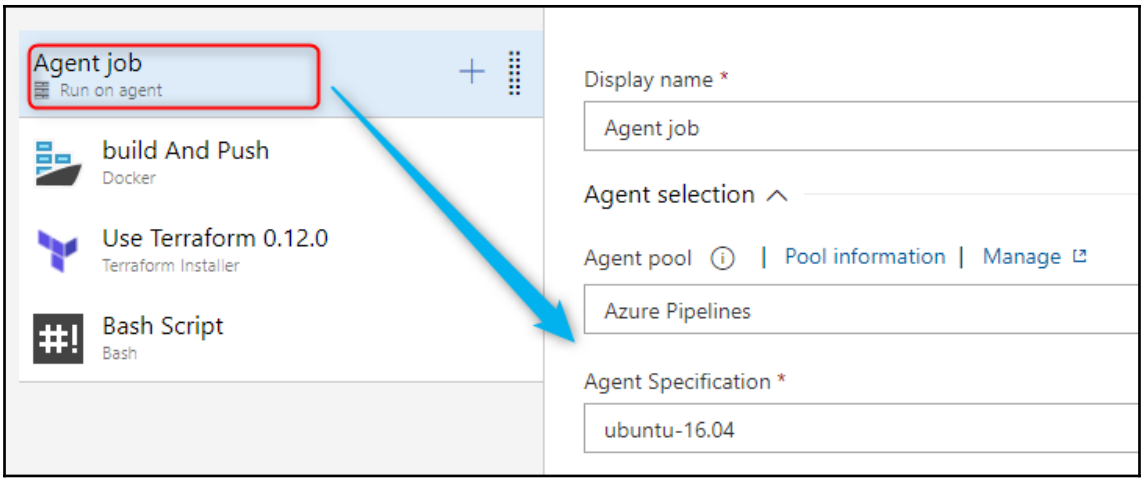

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Summary
Queue
Pipeline variables
Variable groups
Predefined variables
Name
Value
ARM_CLIENT_ID
94a2ea7d-10c9-46b3-8
ARM_CLIENT_SECRET
****
ARM_SUBSCRIPTION_ID
1da42ac9-ee3e
ARM_TENANT_ID
2e3a33f9-66b1
dockerhub_Username
mikael
system.collectionId
76c79aec-9641-44c5-be15-beacfafe67a9
system.debug
true
system.definitionId
2
system.teamProject
BookDemo

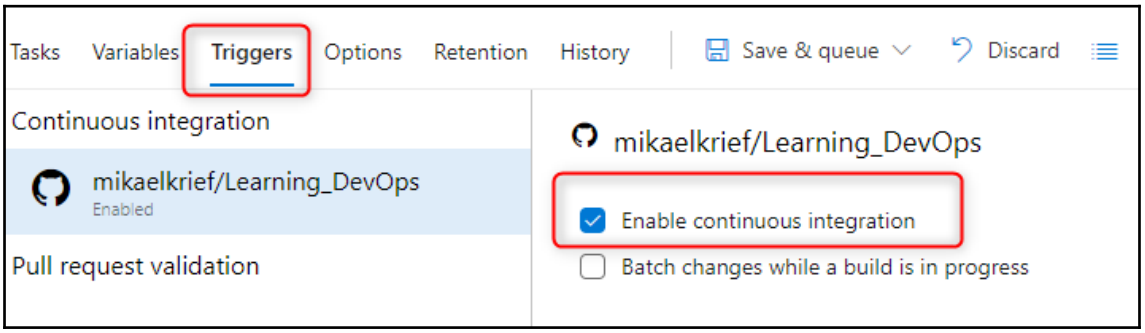

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Pipeline
Build pipeline
Get sources
mikaelkrief/Learning_DevOps
master
Agent job 1
Run on agent
Docker build and push
Docker
1
2
Use Terraform 0.12.0
Terraform Installer
Terraform Execution
Bash
3

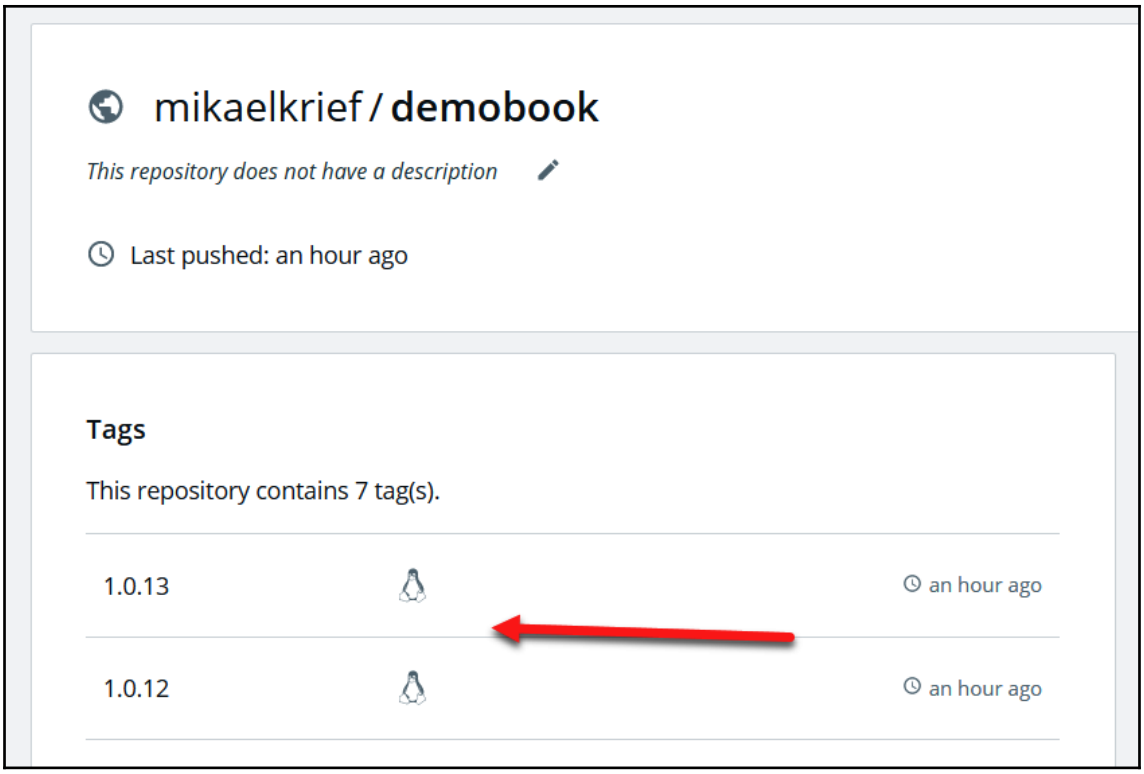

Pipeline
Build pipeline
Get sources
mikaelkrief/Learning_DevOps
master
Agent job 1
Run on agent
Docker build and push
Docker
Use Terraform 0.12
Terraform Installer
Terraform execution
Bash
Container Repository
Container registry
Manage
docker hub
New
Container repository
$(dockerHub_Usename)/demobook
Commands
Command *
buildAndPush
Dockerfile *
CHAP07/appdocker/Dockerfile
Build context
**
Tags
$(Build.BuildNumber)

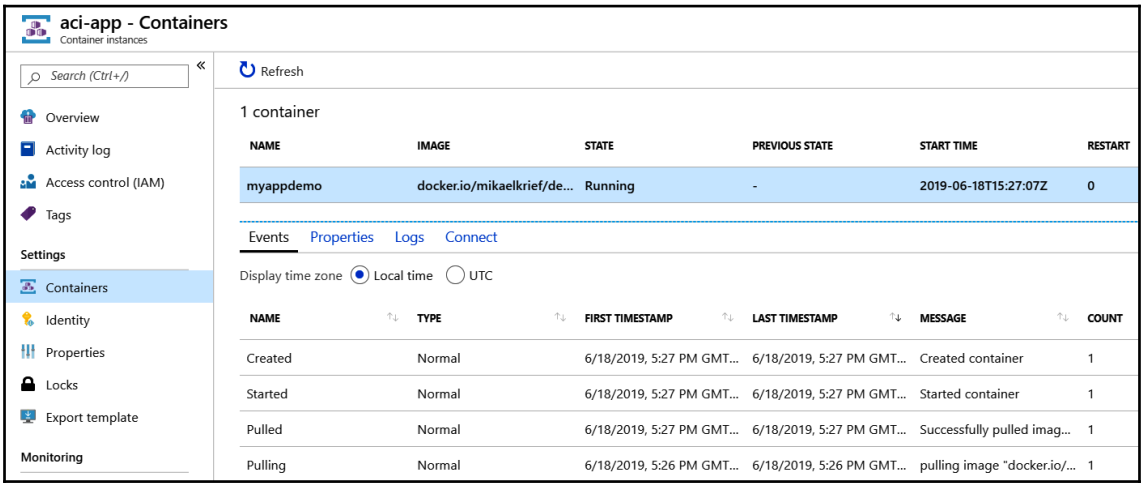

Pipeline
Build pipeline
Get sources
mikaelkrief/Learning_DevOps
master
Agent job 1
Run on agent
Docker build and push
Docker
Use Terraform 0.12.0
Terraform Installer
Terraform Execution
Bash
Terraform Installer
Task version
0.*
Display name *
Use Terraform 0.12.0
Version *
0.12.0
Control Options
Output Variables

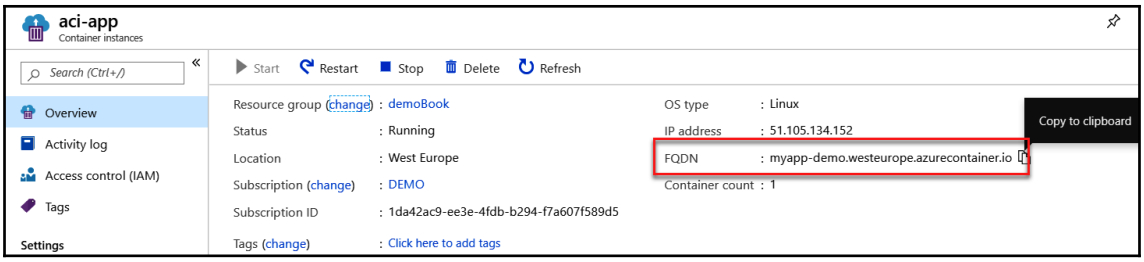

Pipeline
Build pipeline
Get sources
mikaelkrief/Learning_DevOps
master
Agent job 1
Run on agent
Docker build and push
Docker
Use Terraform 0.12.0
Terraform Installer
Terraform Execution
Bash
Bash
Link settings
Task version
3.*
Display name *
Terraform Execution
Type
File Path
Inline
Script *
export ARM_CLIENT_ID="$(ARM_CLIENT_ID)"
export ARM_CLIENT_SECRET="$(ARM_CLIENT_SECRET)"
export ARM_TENANT_ID="$(ARM_TENANT_ID)"
export ARM_SUBSCRIPTION_ID="$(ARM_SUBSCRIPTION_ID)"
terraform init -backend-config="backend.tfvars"
terraform apply -var "imageversion=$(Build.BuildNumber)" -var "dockerhub-username=$(dockerhub_Username)" --auto-approve
Advanced
Working Directory
CHAP07/terraform-aci

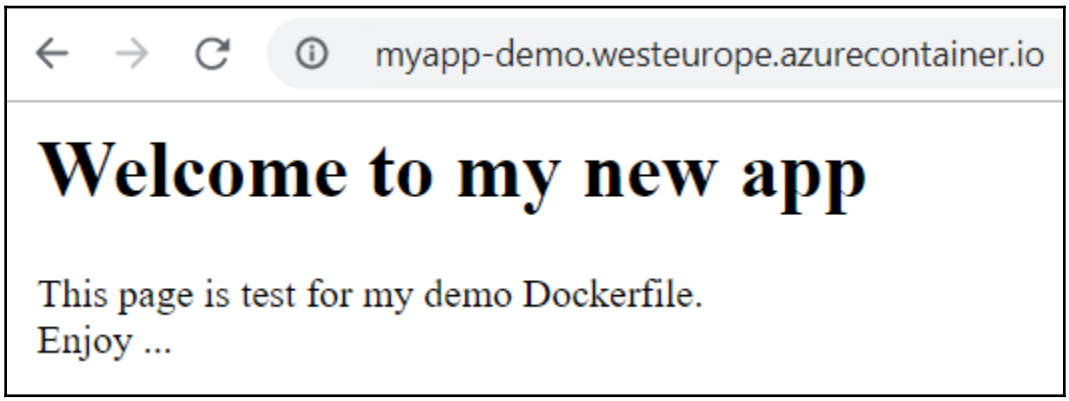

Agent job
Run on agent
build And Push
Docker
Use Terraform 0.12.0
Terraform Installer
Bash Script
Bash
Display name *
Agent job
Agent selection
Agent pool
Pool information
Manage
Azure Pipelines
Agent Specification *
ubuntu-16.04


Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Continuous integration
mikaelkrief/Learning_DevOps
Enabled
Pull request validation
mikaelkrief/Learning_DevOps
Enable continuous integration
Batch changes while a build is in progress

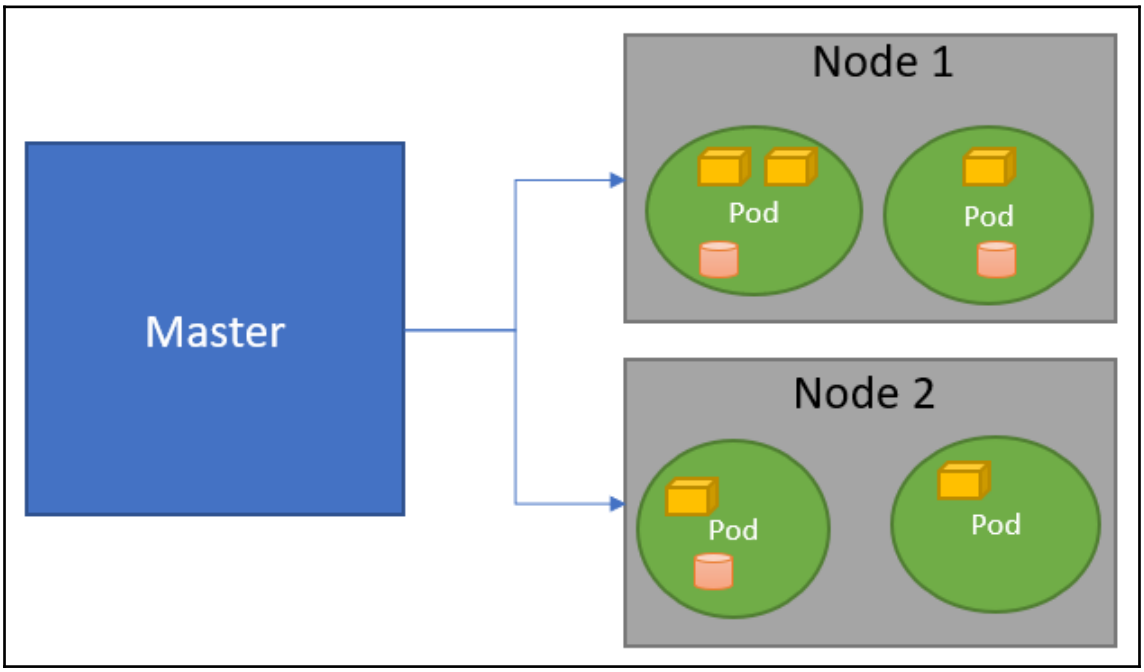

mikaelkrief / demobook
This repository does not have a description
Last pushed: an hour ago
Tags
This repository contains 7 tag(s).
1.0.13
an hour ago
1.0.12
an hour ago

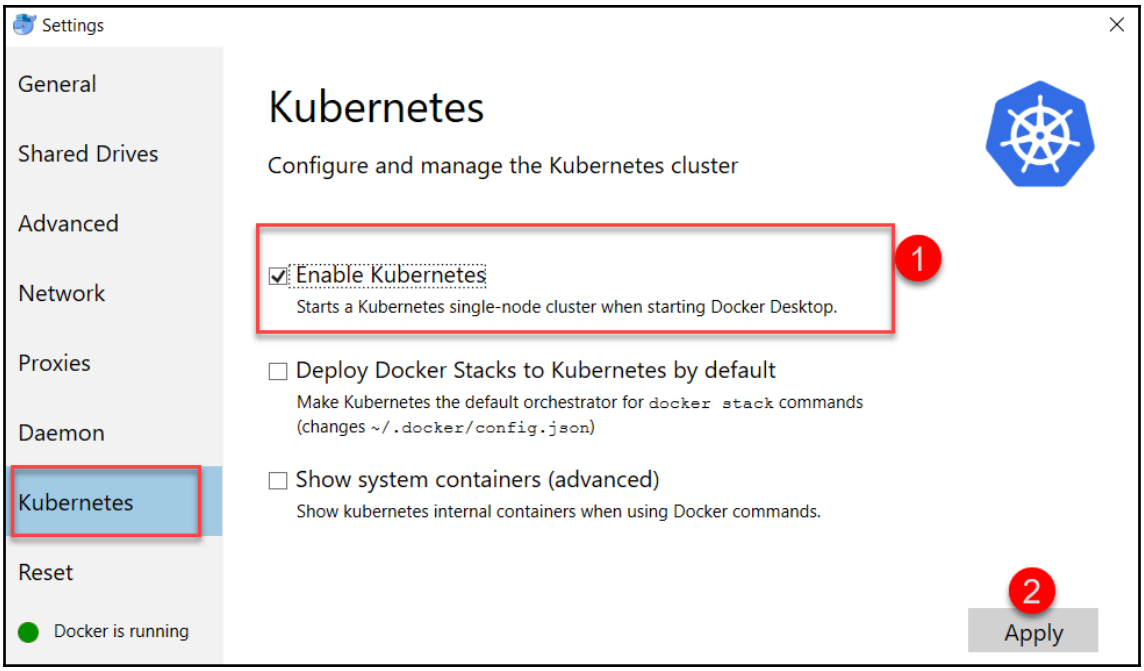

aci-app - Containers
Container instances
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Settings
Containers
Identity
Properties
Locks
Export template
Monitoring
Refresh
1 container
NAME IMAGE STATE PREVIOUS STATE START TIME RESTART
myappdemo docker.io/mikaelkrief/de... Running - 2019-06-18T15:27:07Z 0
Events Properties Logs Connect
Display time zone Local time UTC
NAME TYPE FIRST TIMESTAMP LAST TIMESTAMP MESSAGE COUNT
Created Normal 6/18/2019, 5:27 PM GMT... 6/18/2019, 5:27 PM GMT... Created container 1
Started Normal 6/18/2019, 5:27 PM GMT... 6/18/2019, 5:27 PM GMT... Started container 1
Pulled Normal 6/18/2019, 5:27 PM GMT... 6/18/2019, 5:27 PM GMT... Successfully pulled imag... 1
Pulling Normal 6/18/2019, 5:26 PM GMT... 6/18/2019, 5:26 PM GMT... pulling image "docker.io/... 1


aci-app
Container instances
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Settings
Start
Restart
Stop
Delete
Refresh
Resource group (change) : demoBook
Status : Running
Location : West Europe
Subscription (change) : DEMO
Subscription ID : 1da42ac9-ee3e-4fdb-b294-f7a607f589d5
Tags (change) : Click here to add tags
OS type : Linux
IP address : 51.105.134.152
FQDN : myapp-demo.westeurope.azurecontainer.io
Container count : 1
Copy to clipboard


myapp-demo.westeurope.azurecontainer.io
Welcome to my new app
This page is test for my demo Dockerfile.
Enjoy ...

Chapter 8: Managing Containers Effectively with Kubernetes

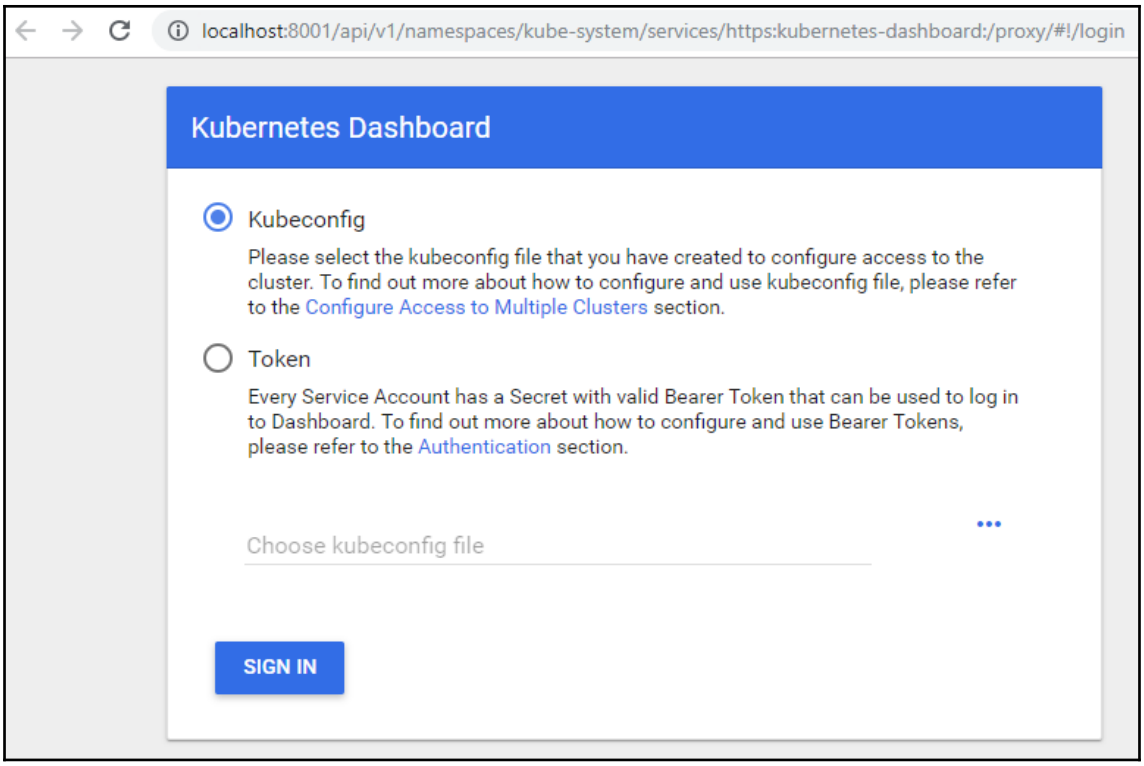


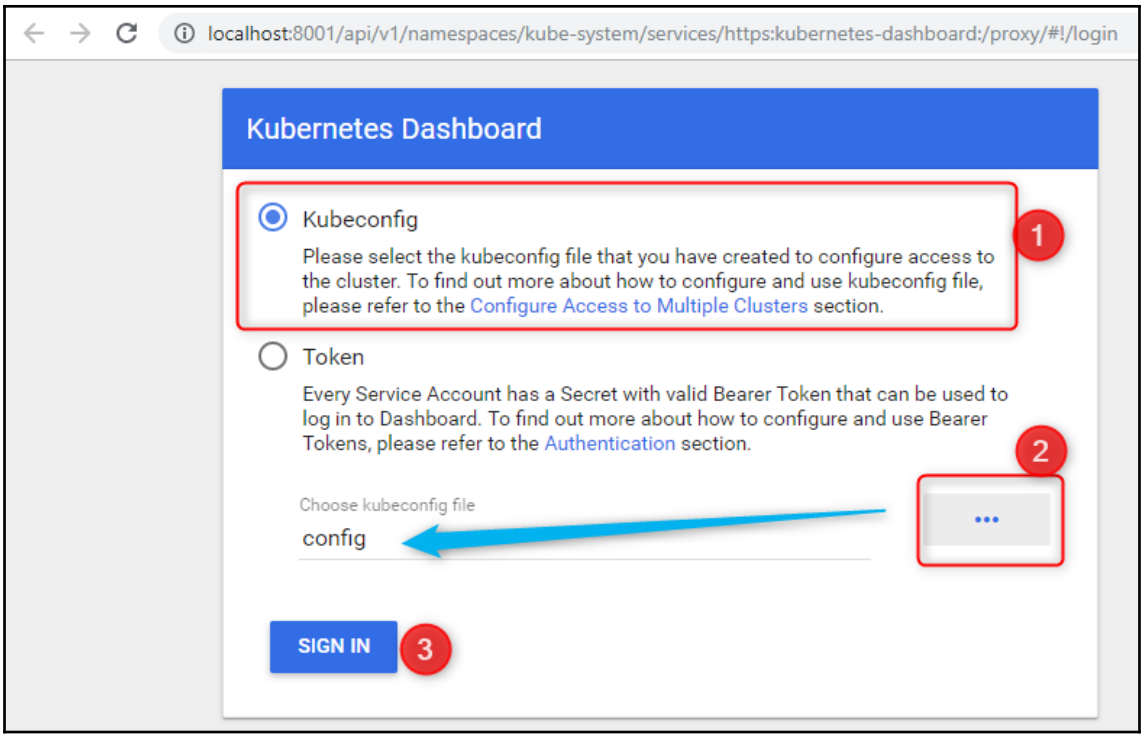


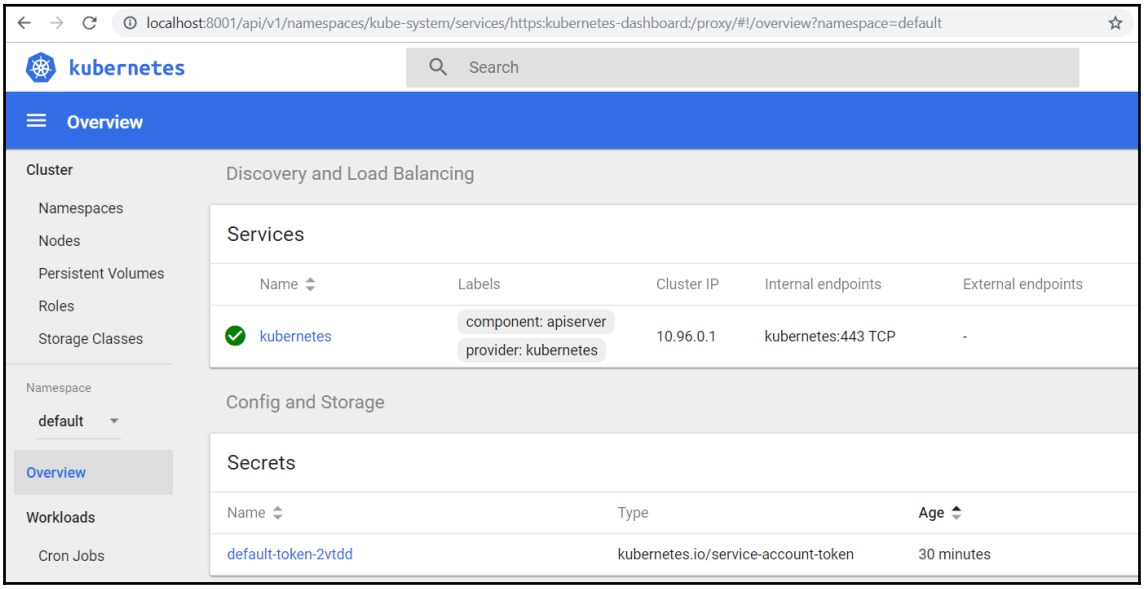

```
C:\Users\Mikael>kubectl version --short
Client Version: v1.14.6
Server Version: v1.13.10
```

```
>kubectl apply -f https://raw.githubusercontent.com/kubernetes/dashboard/v2.0.0-beta1/aio/deploy/recommended.yaml
namespace "kubernetes-dashboard" created
serviceaccount "kubernetes-dashboard" created
service "kubernetes-dashboard" created
secret "kubernetes-dashboard-certs" created
secret "kubernetes-dashboard-csrf" created
secret "kubernetes-dashboard-key-holder" created
configmap "kubernetes-dashboard-settings" created
role.rbac.authorization.k8s.io "kubernetes-dashboard" created
clusterrole.rbac.authorization.k8s.io "kubernetes-dashboard" created
rolebinding.rbac.authorization.k8s.io "kubernetes-dashboard" created
clusterrolebinding.rbac.authorization.k8s.io "kubernetes-dashboard" created
deployment.apps "kubernetes-dashboard" created
service "dashboard-metrics-scraper" created
deployment.apps "kubernetes-metrics-scraper" created
```

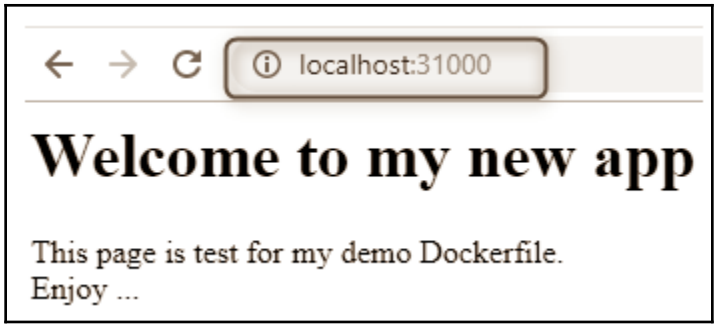
```
>kubectl proxy
Starting to serve on 127.0.0.1:8001
```


localhost:8001/api/v1/namespaces/kube-system/services/https:kubernetes-dashboard:/proxy/#!/login
Kubernetes Dashboard
Kubeconfig
Please select the kubeconfig file that you have created to configure access to the cluster. To find out more about how to configure and use kubeconfig file, please refer to the Configure Access to Multiple Clusters section.
Token
Every Service Account has a Secret with valid Bearer Token that can be used to log in to Dashboard. To find out more about how to configure and use Bearer Tokens, please refer to the Authentication section.
Choose kubeconfig file
SIGN IN


localhost:8001/api/v1/namespaces/kube-system/services/https:kubernetes-dashboard:/proxy/#!/login
Kubernetes Dashboard
Kubeconfig
Please select the kubeconfig file that you have created to configure access to the cluster. To find out more about how to configure and use kubeconfig file, please refer to the Configure Access to Multiple Clusters section.
1
Token
Every Service Account has a Secret with valid Bearer Token that can be used to log in to Dashboard. To find out more about how to configure and use Bearer Tokens, please refer to the Authentication section.
2
Choose kubeconfig file
config
SIGN IN
3


localhost:8001/api/v1/namespaces/kube-system/services/https:kubernetes-dashboard:/proxy/#!/overview?namespace=default
kubernetes
Search
Overview
Cluster
Namespaces
Nodes
Persistent Volumes
Roles
Storage Classes
Namespace
default
Overview
Workloads
Cron Jobs
Discovery and Load Balancing
Services
Name
Labels
Cluster IP
Internal endpoints
External endpoints
kubernetes
component: apiserver
provider: kubernetes
10.96.0.1
kubernetes:443 TCP
-
Config and Storage
Secrets
Name
Type
Age
default-token-2vtdd
kubernetes.io/service-account-token
30 minutes

```
[        \Learning_DevOps\CHAP08\k8sdeploy>kubectl apply -f myapp-deployment.yml
deployment.apps "webapp" created

[        \Learning_DevOps\CHAP08\k8sdeploy>kubectl get pods
NAME                      READY     STATUS    RESTARTS   AGE
webapp-69d88f7d99-jrd7w   1/1       Running   0          7s
webapp-69d88f7d99-t55k5   1/1       Running   0          7s
```

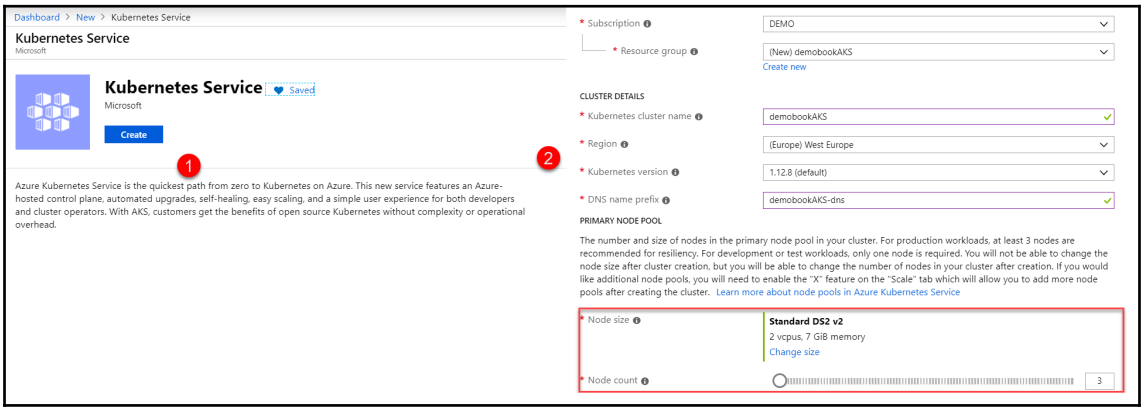



```
PS C:\Users\Mikael> helm --help
The Kubernetes package manager

To begin working with Helm, run the 'helm init' command:

        $ helm init

This will install Tiller to your running Kubernetes cluster.
It will also set up any necessary local configuration.

Common actions from this point include:

- helm search:    search for charts
- helm fetch:     download a chart to your local directory to view
- helm install:   upload the chart to Kubernetes
- helm list:      list releases of charts
```

```
PS                    > helm init
Creating              \.helm
Creating              \.helm\repository
Creating              \.helm\repository\cache
Creating              \.helm\repository\local
Creating              \.helm\plugins
Creating              \.helm\starters
Creating              \.helm\cache\archive
Creating              \.helm\repository\repositories.yaml
Adding st             https://kubernetes-charts.storage.googleapis.com
Adding local repo with URL: http://127.0.0.1:8879/charts
$HELM_HOME has been configured at                   F\.helm.

Tiller (the Helm server-side component) has been installed into your Kubernetes Cluster.

Please note: by default, Tiller is deployed with an insecure 'allow unauthenticated users' policy.
To prevent this, run `helm init` with the --tiller-tls-verify flag.
For more information on securing your installation see: https://docs.helm.sh/using_helm/#securing-your-helm-installation
```

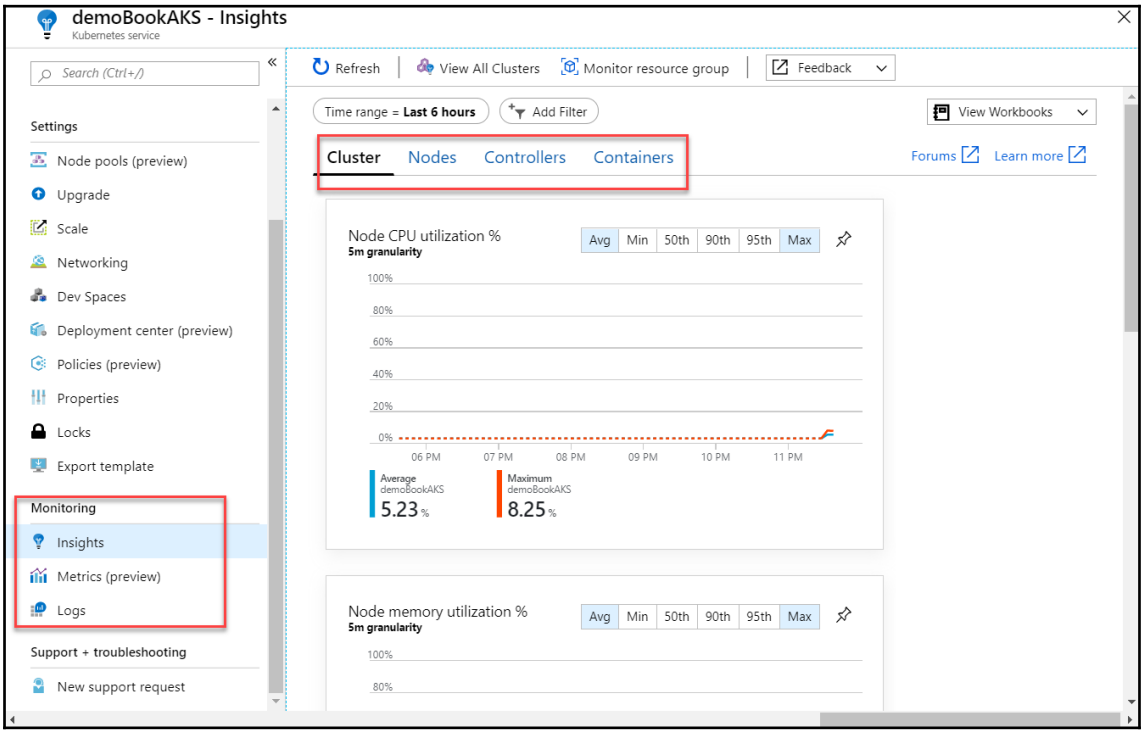
Windows PowerShell

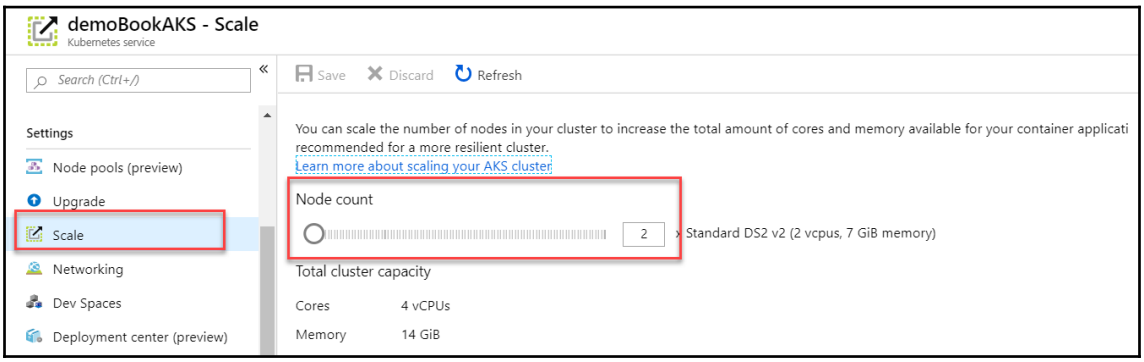
```
PS C:\Users\Mikael> helm search stable/
NAME                            CHART VERSION   APP VERSION     DESCRIPTION
stable/acs-engine-autoscaler    2.2.2           2.1.1           DEPRECATED Scales worker nodes within agent pools
stable/aerospike                0.2.8           v4.5.0.5        A Helm chart for Aerospike in Kubernetes
stable/airflow                  3.0.1           1.10.2          Airflow is a platform to programmatically author, schedul...
stable/ambassador               2.8.2           0.72.0          A Helm chart for Datawire Ambassador
stable/anchore-engine           1.1.1           0.4.0           Anchore container analysis and policy evaluation engine s...
stable/apm-server               2.1.3           7.0.0           The server receives data from the Elastic APM agents and ...
stable/ark                      4.2.2           0.10.2          DEPRECATED A Helm chart for ark
stable/artifactory              7.3.1           6.1.0           DEPRECATED Universal Repository Manager supporting all ma...
stable/artifactory-ha           0.4.1           6.2.0           DEPRECATED Universal Repository Manager supporting all ma...
stable/atlantis                 3.5.3           v0.7.1          A Helm chart for Atlantis https://www.runatlantis.io
stable/auditbeat                1.1.0           6.7.0           A lightweight shipper to audit the activities of users an...
stable/aws-cluster-autoscaler   0.3.3                           Scales worker nodes within autoscaling groups.
stable/aws-iam-authenticator    0.1.0           1.0             A Helm chart for aws-iam-authenticator
stable/bitcoind                 0.2.2           0.17.1          Bitcoin is an innovative payment network and a new kind o...
stable/bookstack                1.1.0           0.25.2          BookStack is a simple, self-hosted, easy-to-use platform ...
stable/buildkite                0.2.4           3               DEPRECATED Agent for Buildkite
```

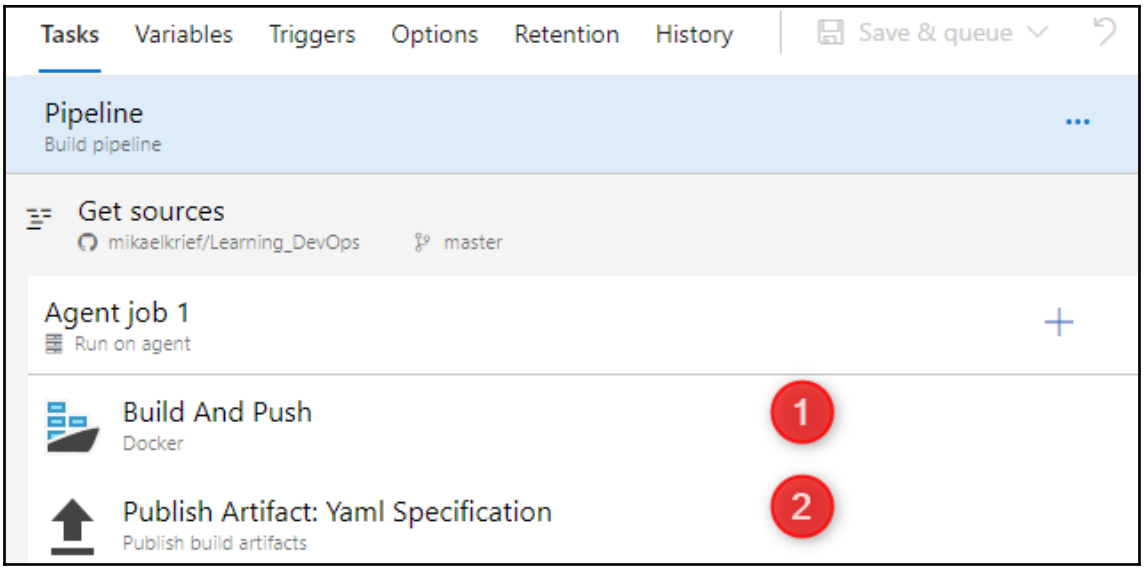


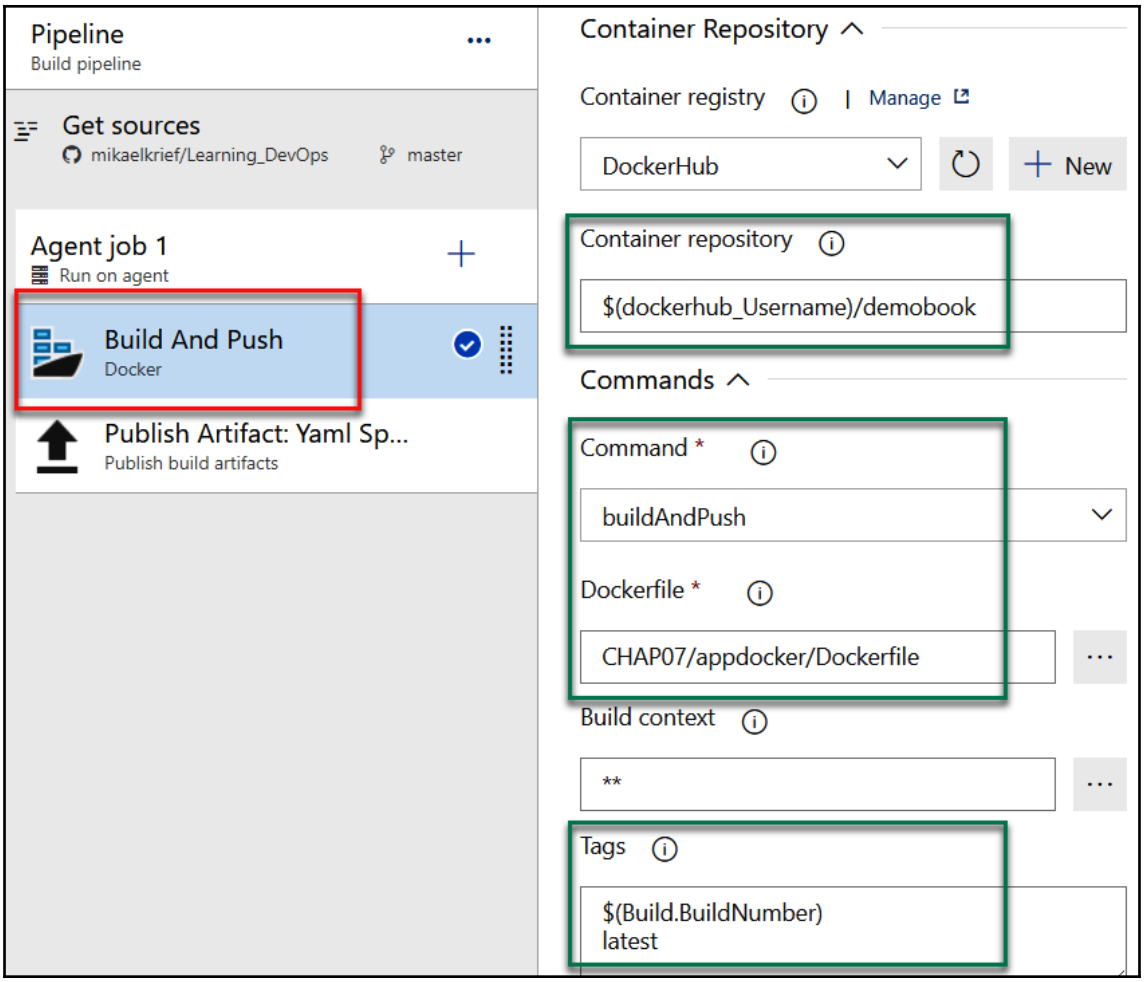

```
C:                  l>az aks get-credentials --resource-group Rg-AKS --name demoBookAKS
Merged "demoBookAKS" as current context in                  \.kube\config
```

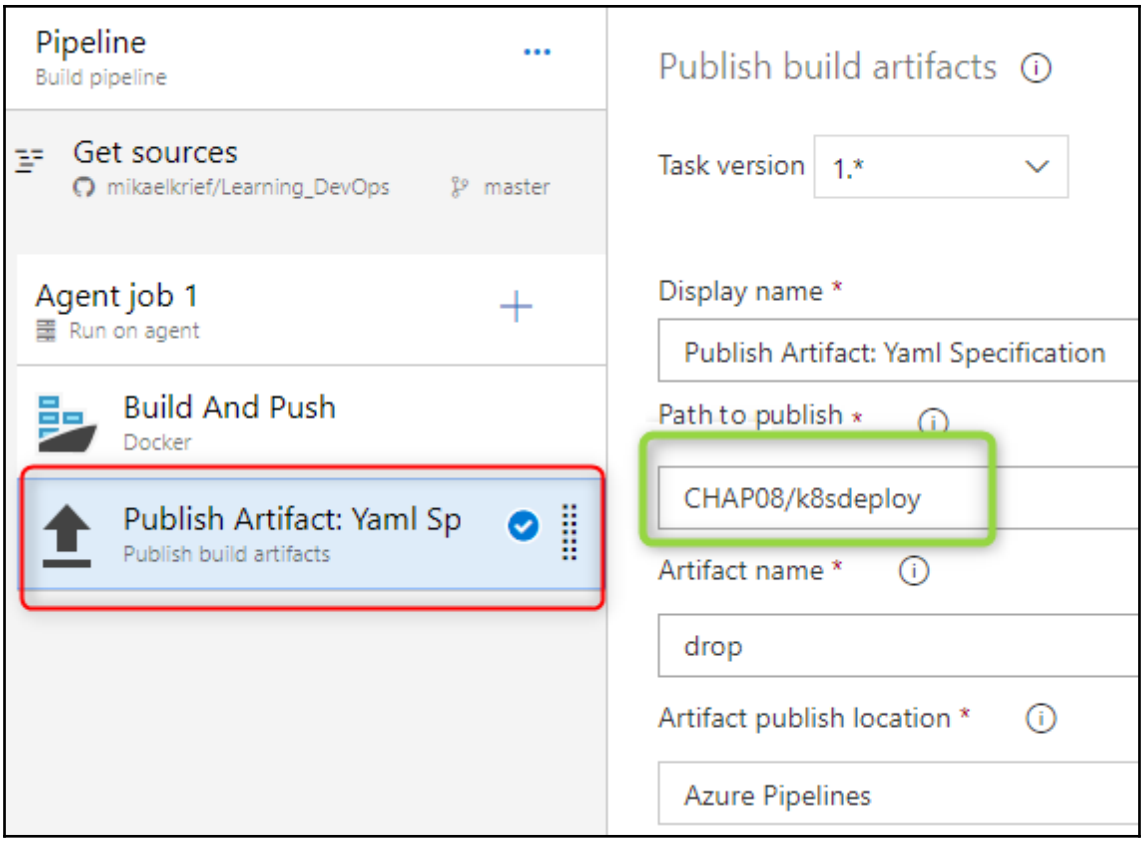
```
>kubectl get nodes
NAME                                STATUS    ROLES     AGE       VERSION
aks-nodepool1-41966373-0    Ready     agent     8m        v1.12.8
aks-nodepool1-41966373-1    Ready     agent     8m        v1.12.8
```

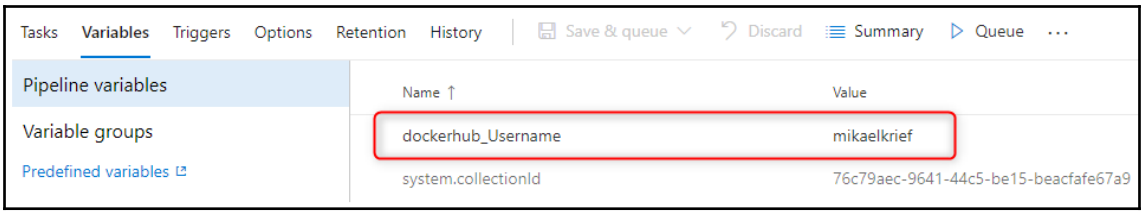


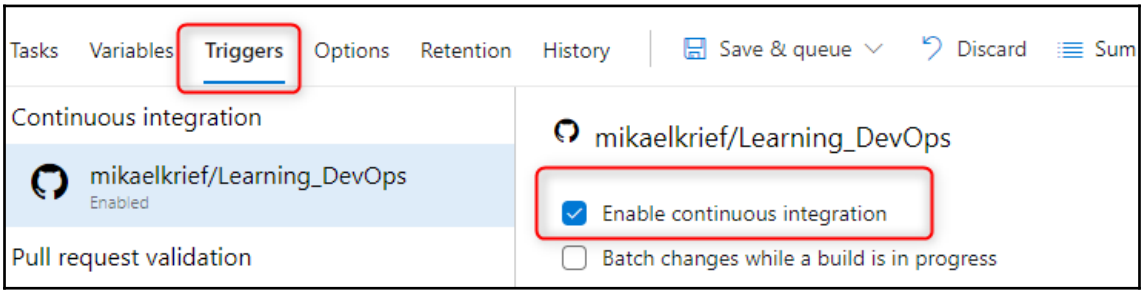


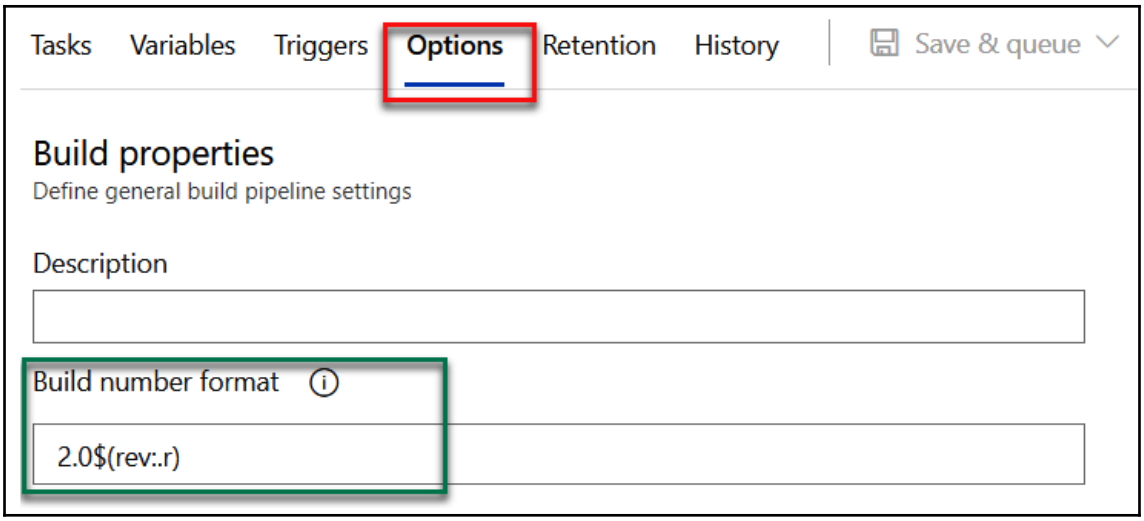

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Pipeline
Build pipeline
Get sources
mikaelkrief/Learning_DevOps
master
Agent job 1
Run on agent
Build And Push
Docker
1
Publish Artifact: Yaml Specification
Publish build artifacts
2

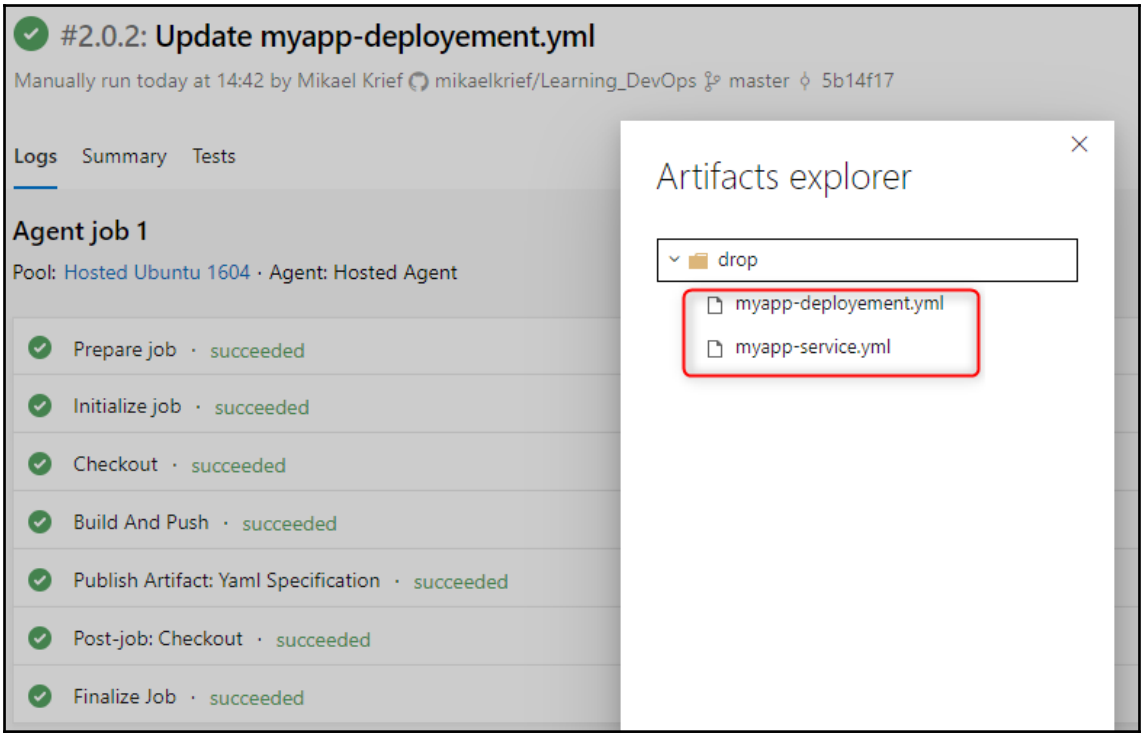

Pipeline
Build pipeline
Get sources
mikaelkrief/Learning_DevOps
master
Agent job 1
Run on agent
Build And Push
Docker
Publish Artifact: Yaml Sp...
Publish build artifacts
Container Repository
Container registry
Manage
DockerHub
New
Container repository
$(dockerhub_Username)/demobook
Commands
Command *
buildAndPush
Dockerfile *
CHAP07/appdocker/Dockerfile
Build context
**
Tags
$(Build.BuildNumber)
latest

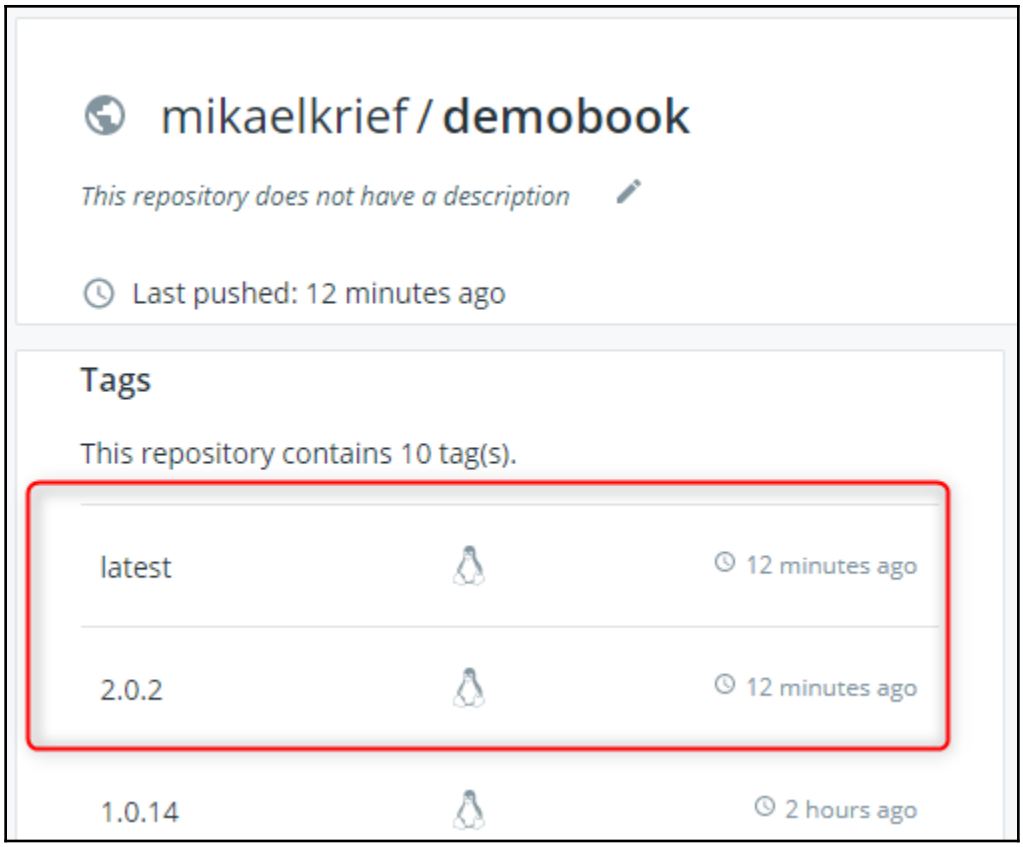

Pipeline
Build pipeline
Get sources
mikaelkrief/Learning_DevOps
master
Agent job 1
Run on agent
Build And Push
Docker
Publish Artifact: Yaml Sp
Publish build artifacts
Publish build artifacts
Task version
1.*
Display name *
Publish Artifact: Yaml Specification
Path to publish *
CHAP08/k8sdeploy
Artifact name *
drop
Artifact publish location *
Azure Pipelines

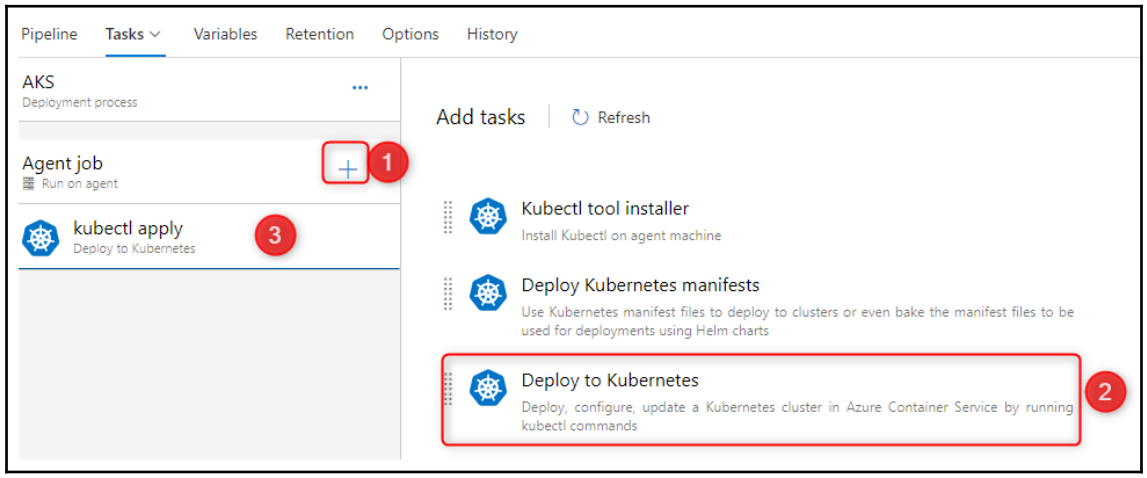

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Summary
Queue
Pipeline variables
Variable groups
Predefined variables
Name
Value
dockerhub_Username
mikaelkrief
system.collectionId
76c79aec-9641-44c5-be15-beacfafe67a9

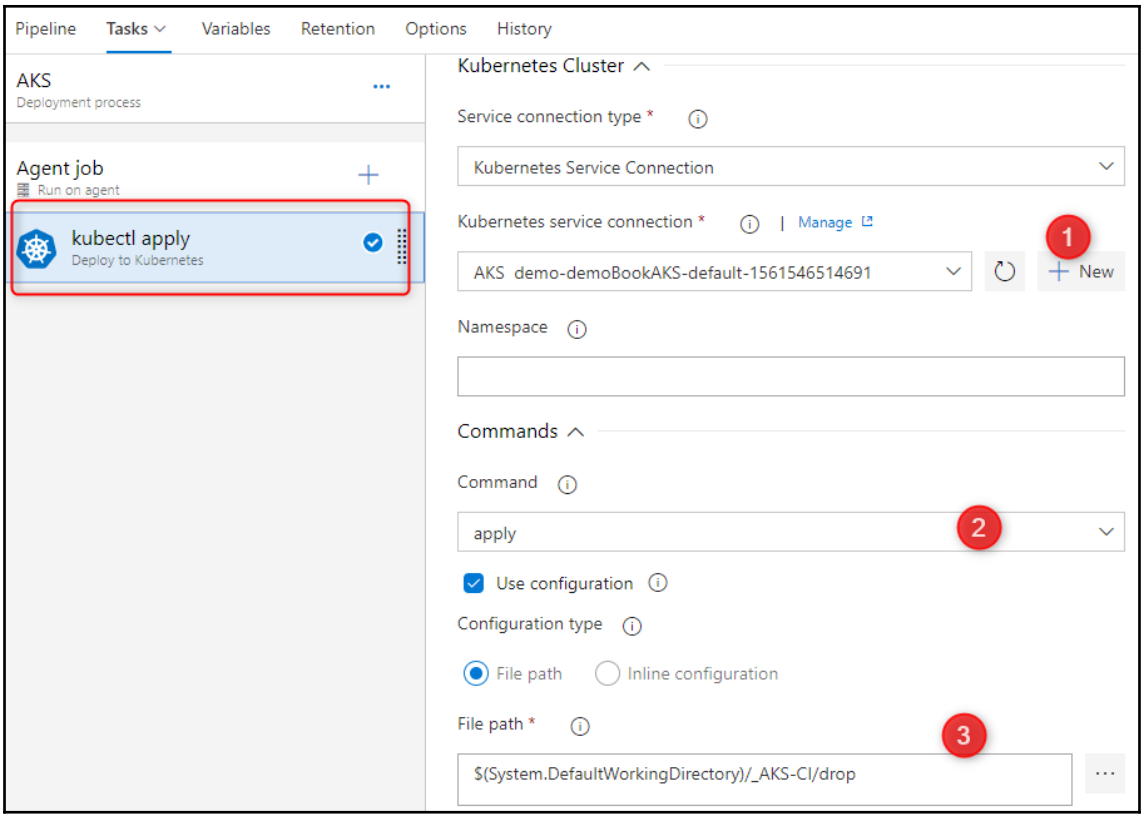

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Continuous integration
mikaelkrief/Learning_DevOps
Enabled
Pull request validation
mikaelkrief/Learning_DevOps
Enable continuous integration
Batch changes while a build is in progress

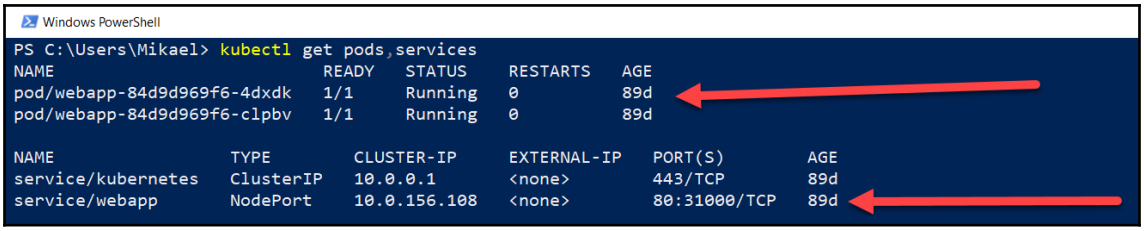

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Build properties
Define general build pipeline settings
Description
Build number format
2.0$(rev:.r)

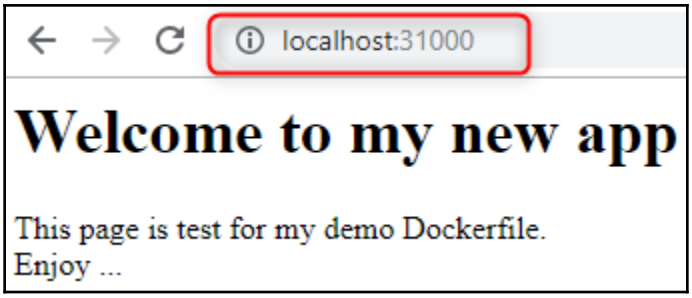

#2.0.2: Update myapp-deployement.yml
Manually run today at 14:42 by Mikael Krief mikaelkrief/Learning_DevOps master 5b14f17
Logs
Summary
Tests
Agent job 1
Pool: Hosted Ubuntu 1604 · Agent: Hosted Agent
Prepare job · succeeded
Initialize job · succeeded
Checkout · succeeded
Build And Push · succeeded
Publish Artifact: Yaml Specification · succeeded
Post-job: Checkout · succeeded
Finalize Job · succeeded
Artifacts explorer
drop
myapp-deployement.yml
myapp-service.yml


mikaelkrief / demobook
This repository does not have a description
Last pushed: 12 minutes ago
Tags
This repository contains 10 tag(s).
latest
12 minutes ago
2.0.2
12 minutes ago
1.0.14
2 hours ago

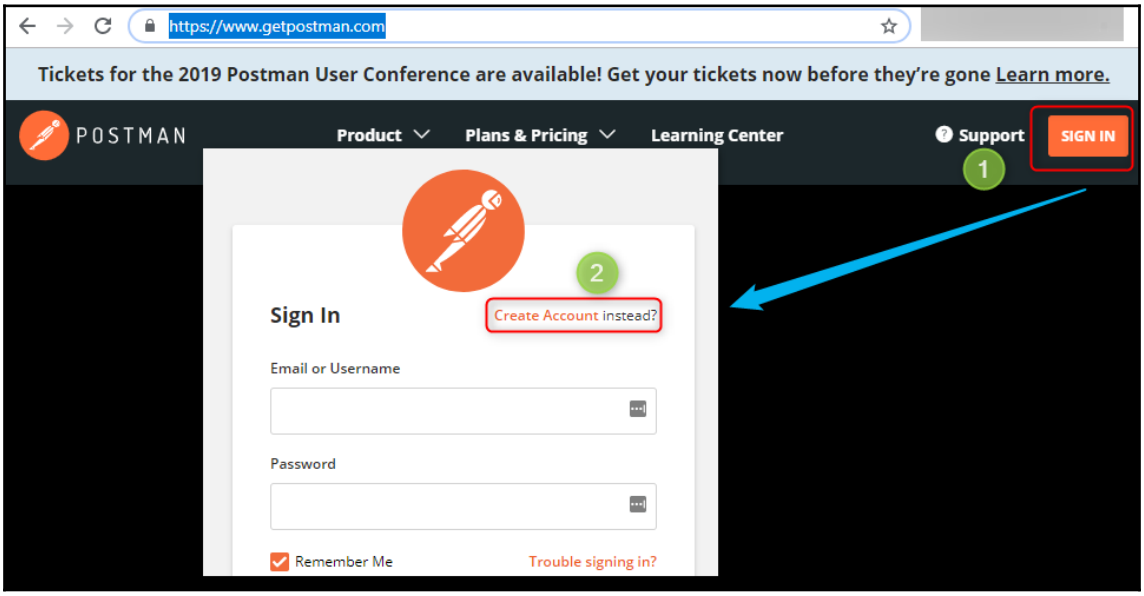

Pipeline
Tasks
Variables
Retention
Options
History
AKS
Deployment process
Agent job
Run on agent
1
kubectl apply
Deploy to Kubernetes
3
Add tasks
Refresh
Kubectl tool installer
Install Kubectl on agent machine
Deploy Kubernetes manifests
Use Kubernetes manifest files to deploy to clusters or even bake the manifest files to be used for deployments using Helm charts
Deploy to Kubernetes
Deploy, configure, update a Kubernetes cluster in Azure Container Service by running kubectl commands
2

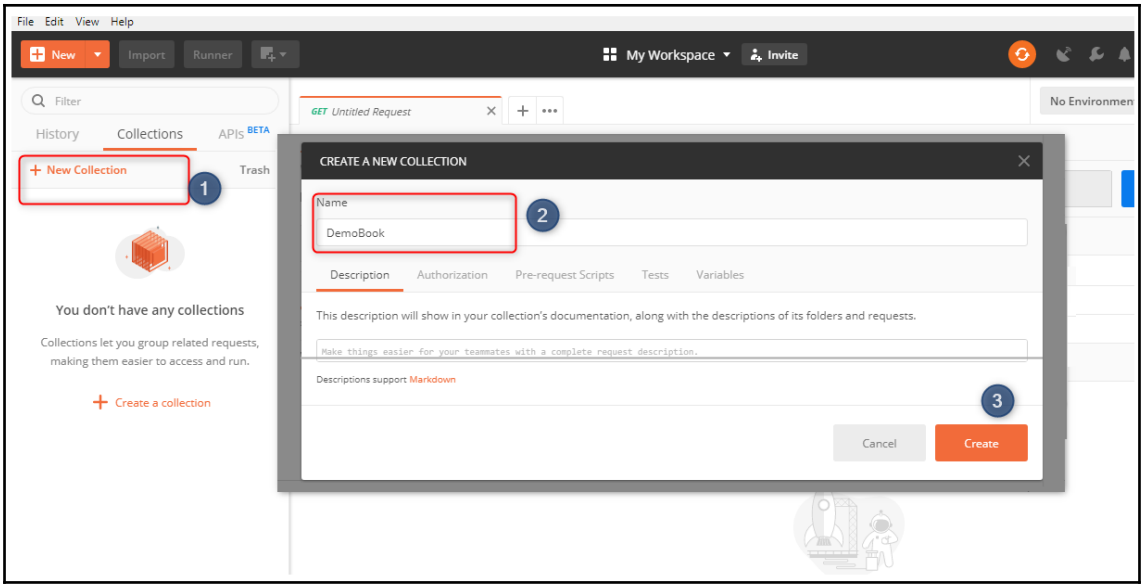

Pipeline
Tasks
Variables
Retention
Options
History
AKS
Deployment process
Agent job
Run on agent
kubectl apply
Deploy to Kubernetes
Kubernetes Cluster
Service connection type *
Kubernetes Service Connection
Kubernetes service connection *
Manage
AKS demo-demoBookAKS-default-1561546514691
New
1
Namespace
Commands
Command
apply
2
Use configuration
Configuration type
File path
Inline configuration
File path *
3
$(System.DefaultWorkingDirectory)/_AKS-CI/drop

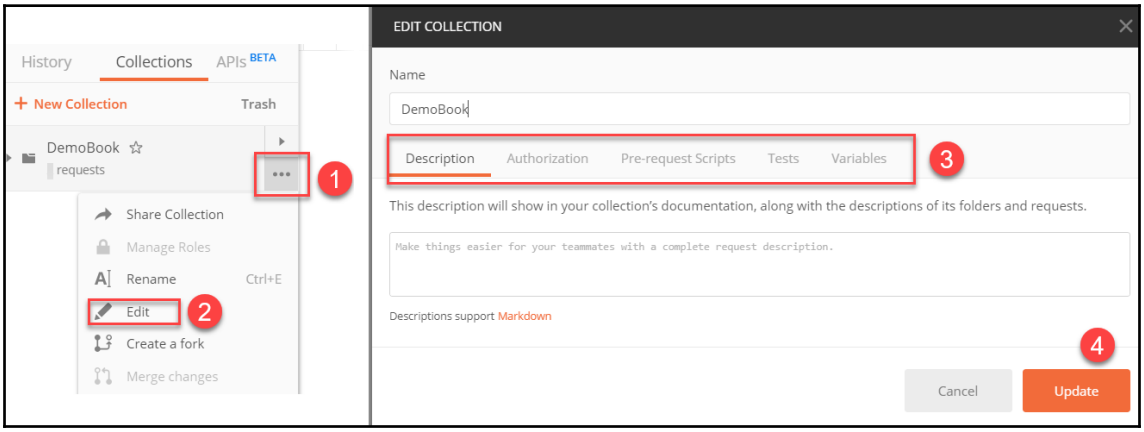

Windows PowerShell
PS C:\Users\Mikael> kubectl get pods,services
NAME READY STATUS RESTARTS AGE
pod/webapp-84d9d969f6-4dxdk 1/1 Running 0 89d
pod/webapp-84d9d969f6-clpbv 1/1 Running 0 89d
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
service/kubernetes ClusterIP 10.0.0.1 <none> 443/TCP 89d
service/webapp NodePort 10.0.156.108 <none> 80:31000/TCP 89d

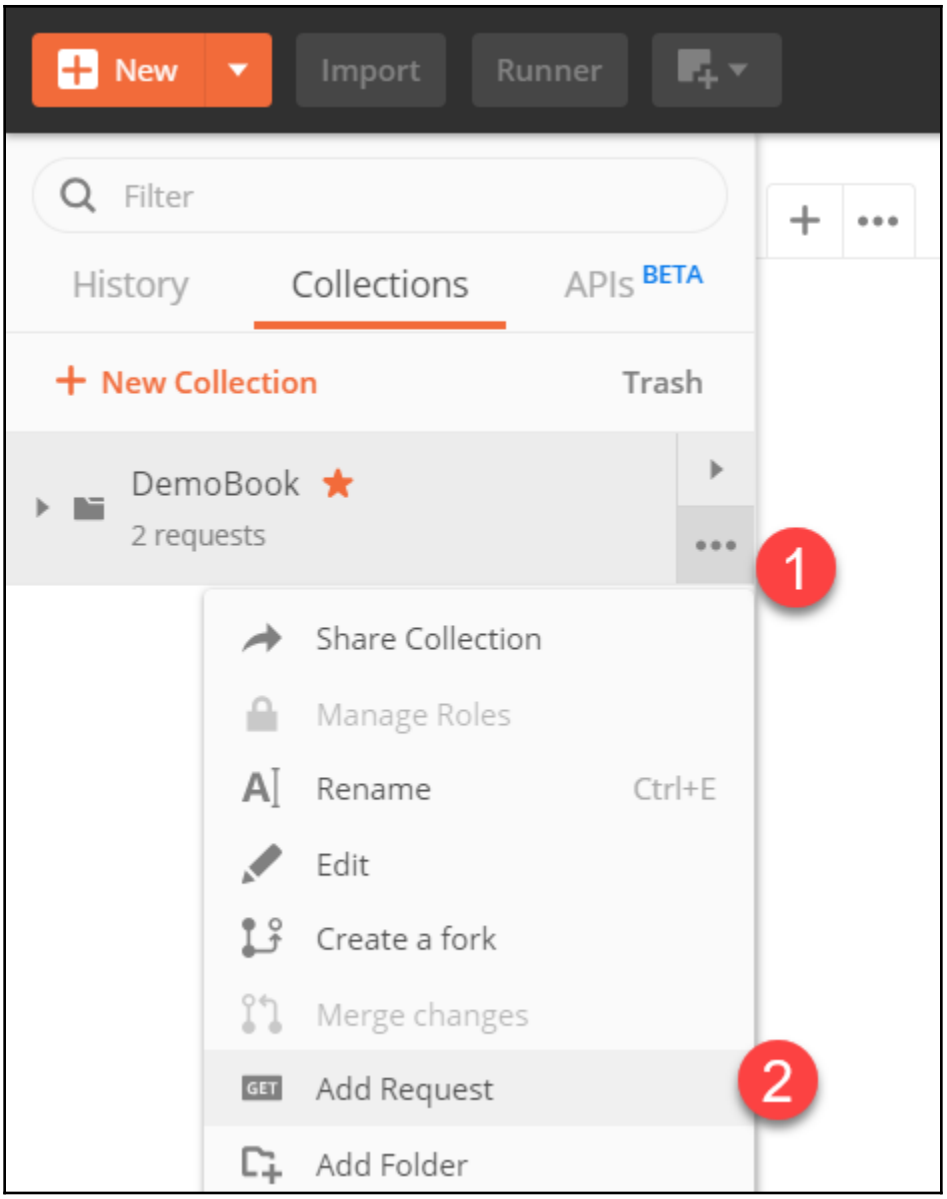

localhost:31000
Welcome to my new app
This page is test for my demo Dockerfile.
Enjoy ...

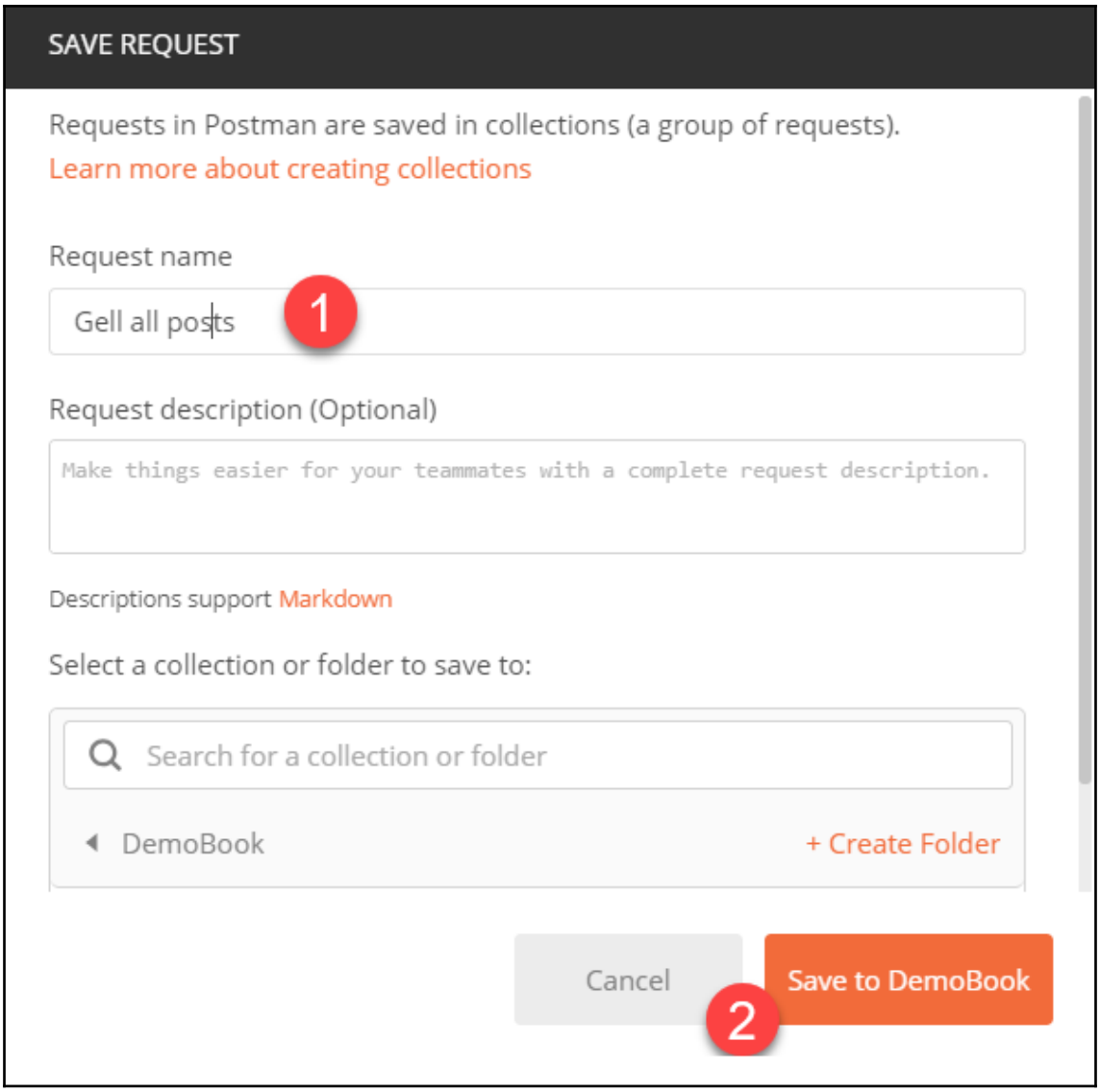
Chapter 9: Testing APIs with Postman

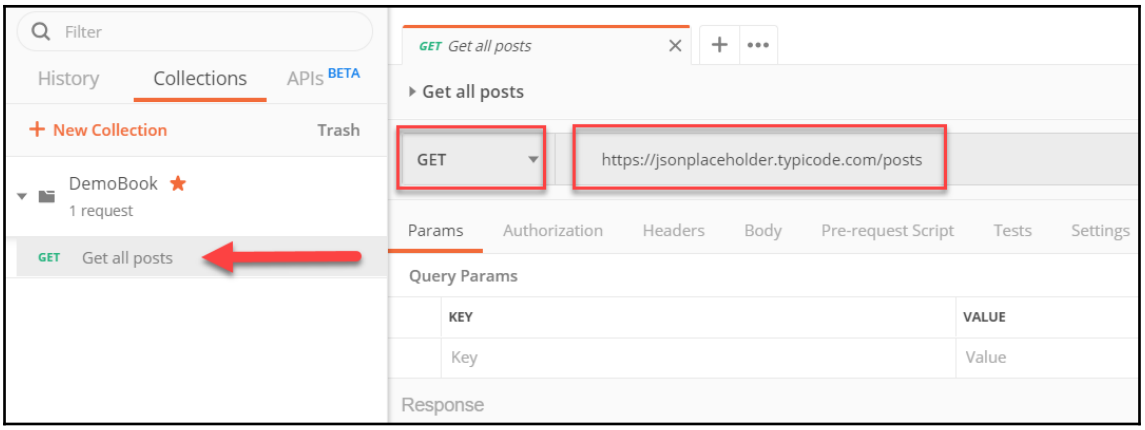


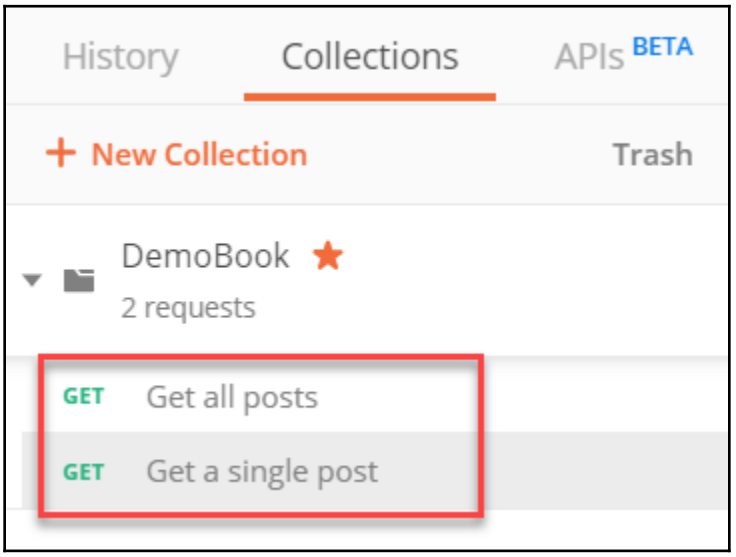

File Edit View Help
New
Import
Runner
My Workspace
Invite
Filter
History
Collections
APIs BETA
New Collection
Trash
GET Untitled Request
No Environmen
CREATE A NEW COLLECTION
Name
DemoBook
Description
Authorization
Pre-request Scripts
Tests
Variables
This description will show in your collection's documentation, along with the descriptions of its folders and requests.
Make things easier for your teammates with a complete request description.
Descriptions support Markdown
Cancel
Create
You don't have any collections
Collections let you group related requests, making them easier to access and run.
Create a collection
1
2
3

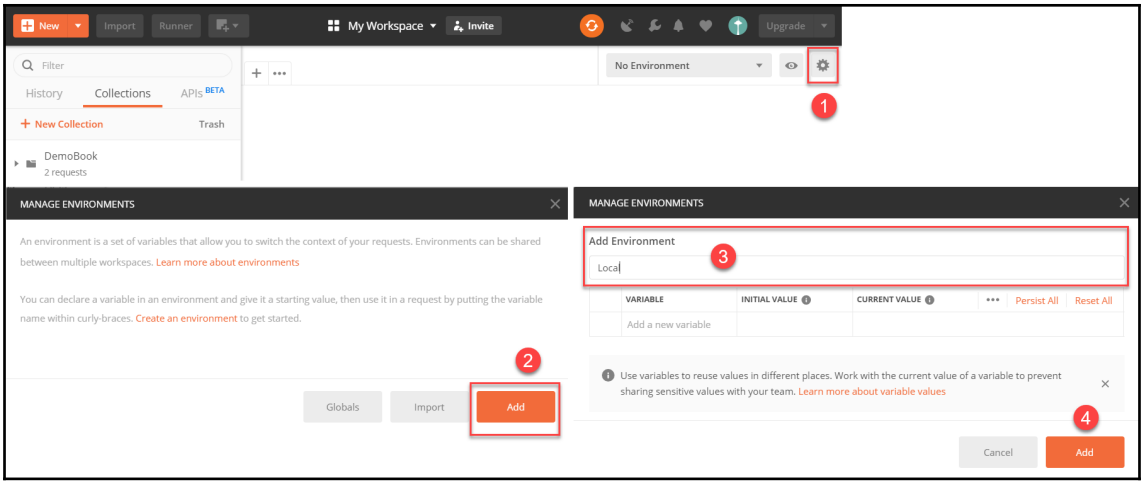

History
Collections
APIs BETA
New Collection
Trash
DemoBook
requests
Share Collection
Manage Roles
Rename
Ctrl+E
Edit
Create a fork
Merge changes
EDIT COLLECTION
Name
DemoBook
Description
Authorization
Pre-request Scripts
Tests
Variables
This description will show in your collection's documentation, along with the descriptions of its folders and requests.
Make things easier for your teammates with a complete request description.
Descriptions support Markdown
Cancel
Update
1
2
3
4

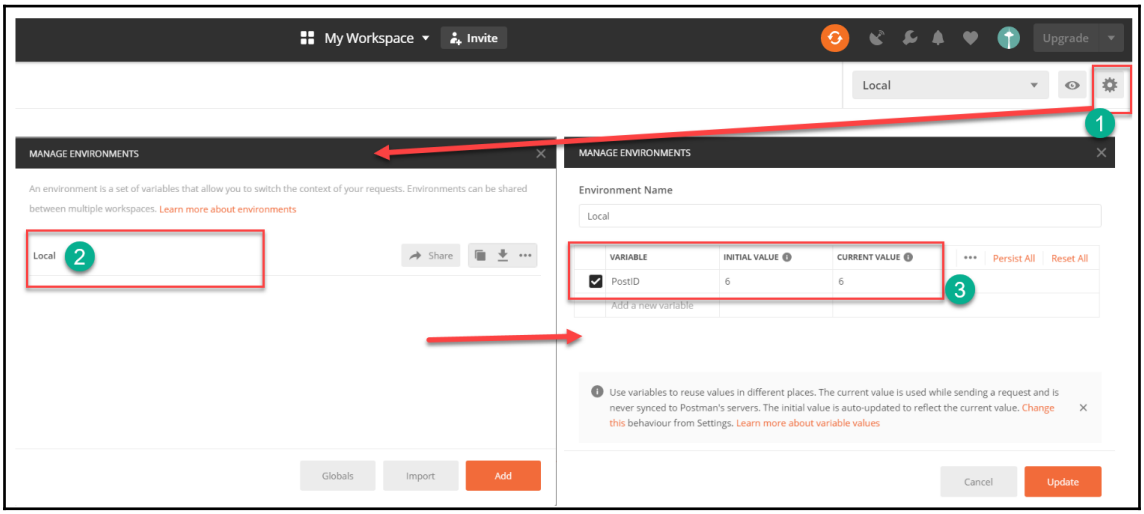

New
Import
Runner
Filter
History
Collections
APIs BETA
New Collection
Trash
DemoBook
2 requests
1
Share Collection
Manage Roles
Rename Ctrl+E
Edit
Create a fork
Merge changes
GET Add Request
2
Add Folder

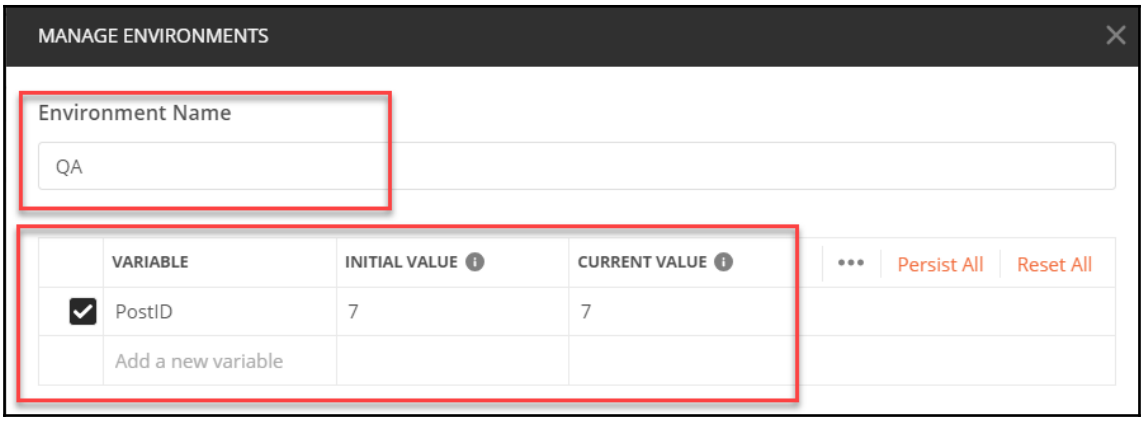

SAVE REQUEST
Requests in Postman are saved in collections (a group of requests).
Learn more about creating collections
Request name
Gell all posts
1
Request description (Optional)
Make things easier for your teammates with a complete request description.
Descriptions support Markdown
Select a collection or folder to save to:
Search for a collection or folder
DemoBook
+ Create Folder
Cancel
Save to DemoBook
2

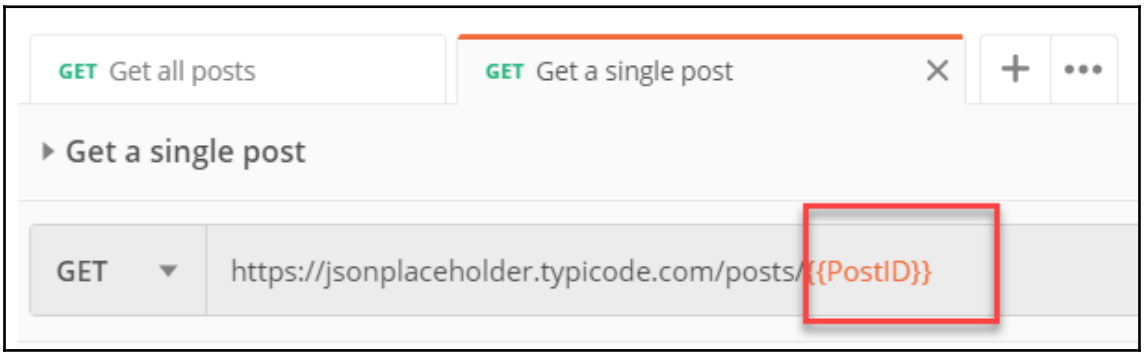

Filter
History
Collections
APIs BETA
New Collection
Trash
DemoBook
1 request
GET Get all posts
GET Get all posts
Get all posts
GET
https://jsonplaceholder.typicode.com/posts
Params
Authorization
Headers
Body
Pre-request Script
Tests
Settings
Query Params
KEY
VALUE
Key
Value
Response

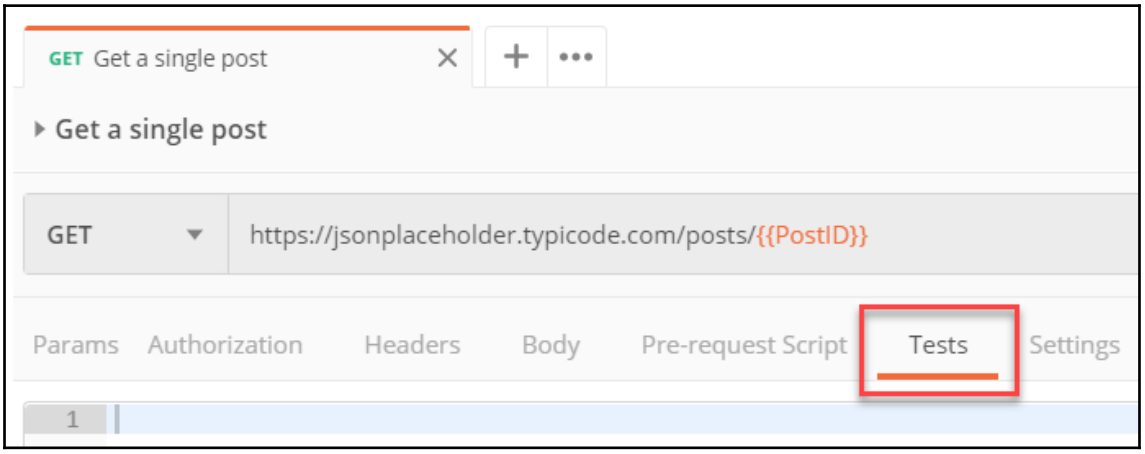

History
Collections
APIs BETA
New Collection
Trash
DemoBook
2 requests
GET Get all posts
GET Get a single post

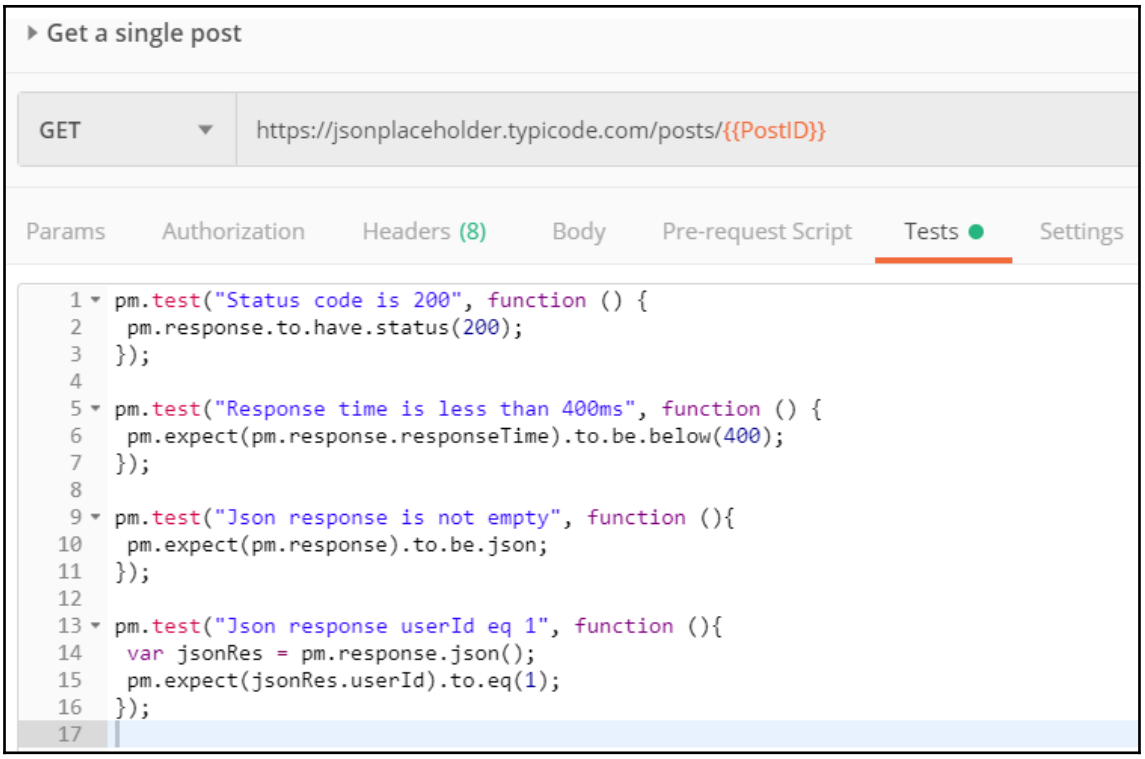

New
Import
Runner
My Workspace
Invite
Upgrade
Filter
History
Collections
APIs BETA
New Collection
Trash
DemoBook
2 requests
No Environment
1
MANAGE ENVIRONMENTS
An environment is a set of variables that allow you to switch the context of your requests. Environments can be shared between multiple workspaces. Learn more about environments
You can declare a variable in an environment and give it a starting value, then use it in a request by putting the variable name within curly-braces. Create an environment to get started.
2
Globals
Import
Add
MANAGE ENVIRONMENTS
Add Environment
3
Local
VARIABLE
INITIAL VALUE
CURRENT VALUE
Persist All
Reset All
Add a new variable
Use variables to reuse values in different places. Work with the current value of a variable to prevent sharing sensitive values with your team. Learn more about variable values
4
Cancel
Add

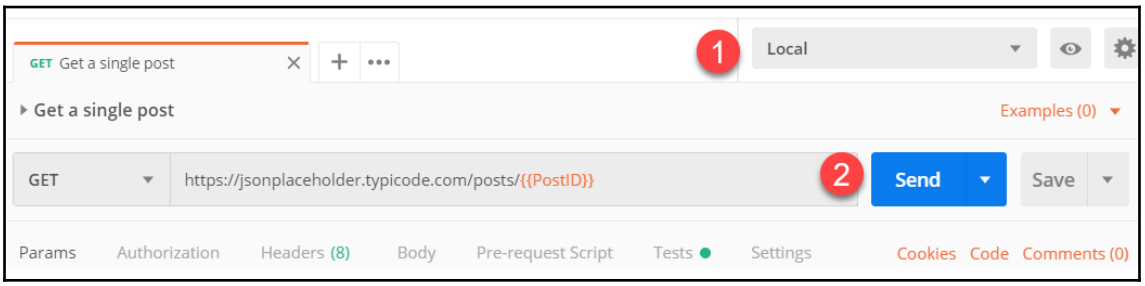

My Workspace
Invite
Upgrade
Local
1
MANAGE ENVIRONMENTS
An environment is a set of variables that allow you to switch the context of your requests. Environments can be shared between multiple workspaces. Learn more about environments
Local
2
Share
Globals
Import
Add
MANAGE ENVIRONMENTS
Environment Name
Local
VARIABLE
INITIAL VALUE
CURRENT VALUE
Persist All
Reset All
PostID
6
6
3
Add a new variable
Use variables to reuse values in different places. The current value is used while sending a request and is never synced to Postman's servers. The initial value is auto-updated to reflect the current value. Change this behaviour from Settings. Learn more about variable values
Cancel
Update

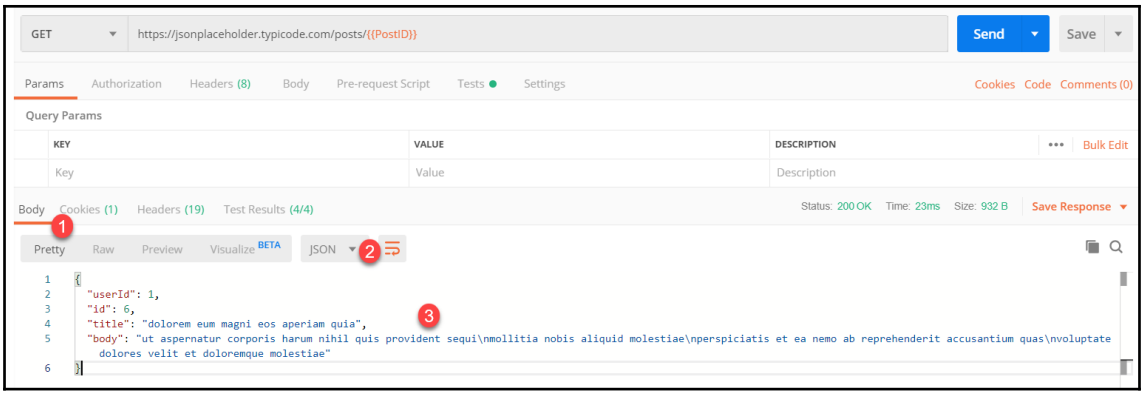

MANAGE ENVIRONMENTS
Environment Name
QA
VARIABLE
INITIAL VALUE
CURRENT VALUE
Persist All
Reset All
PostID
7
7
Add a new variable

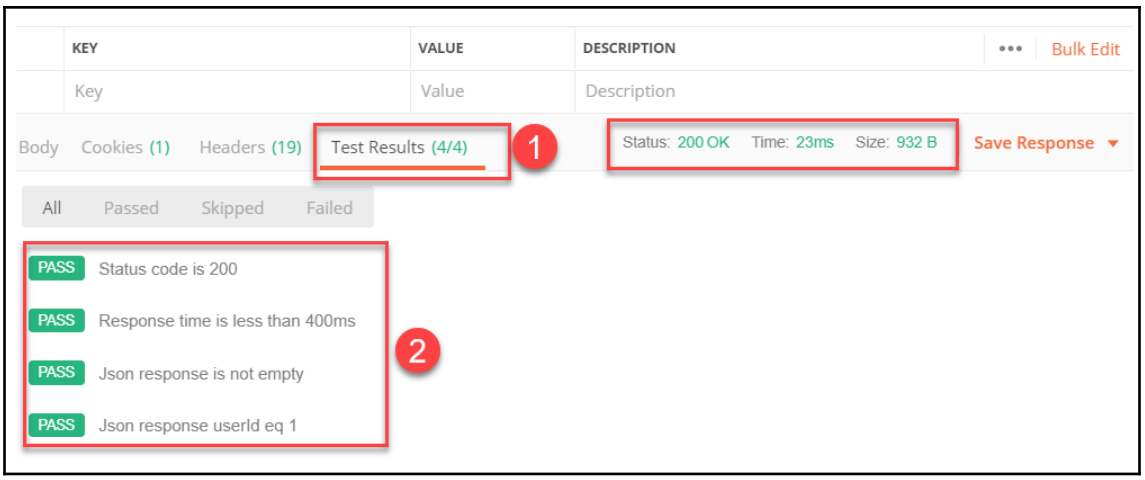

GET Get all posts
GET Get a single post
Get a single post
GET
https://jsonplaceholder.typicode.com/posts/{{PostID}}

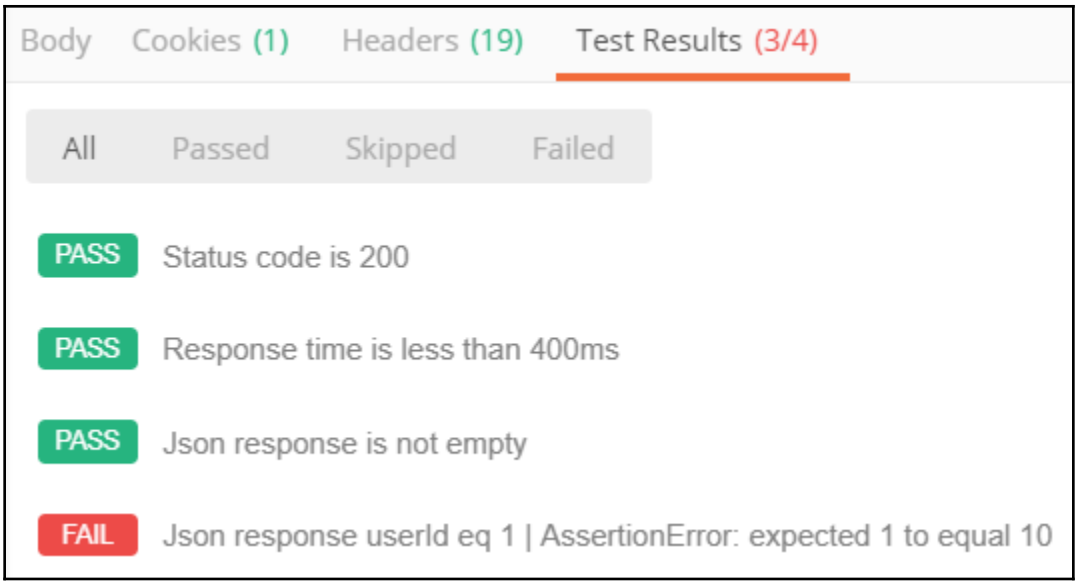

GET Get a single post
Get a single post
GET
https://jsonplaceholder.typicode.com/posts/{{PostID}}
Params
Authorization
Headers
Body
Pre-request Script
Tests
Settings
1

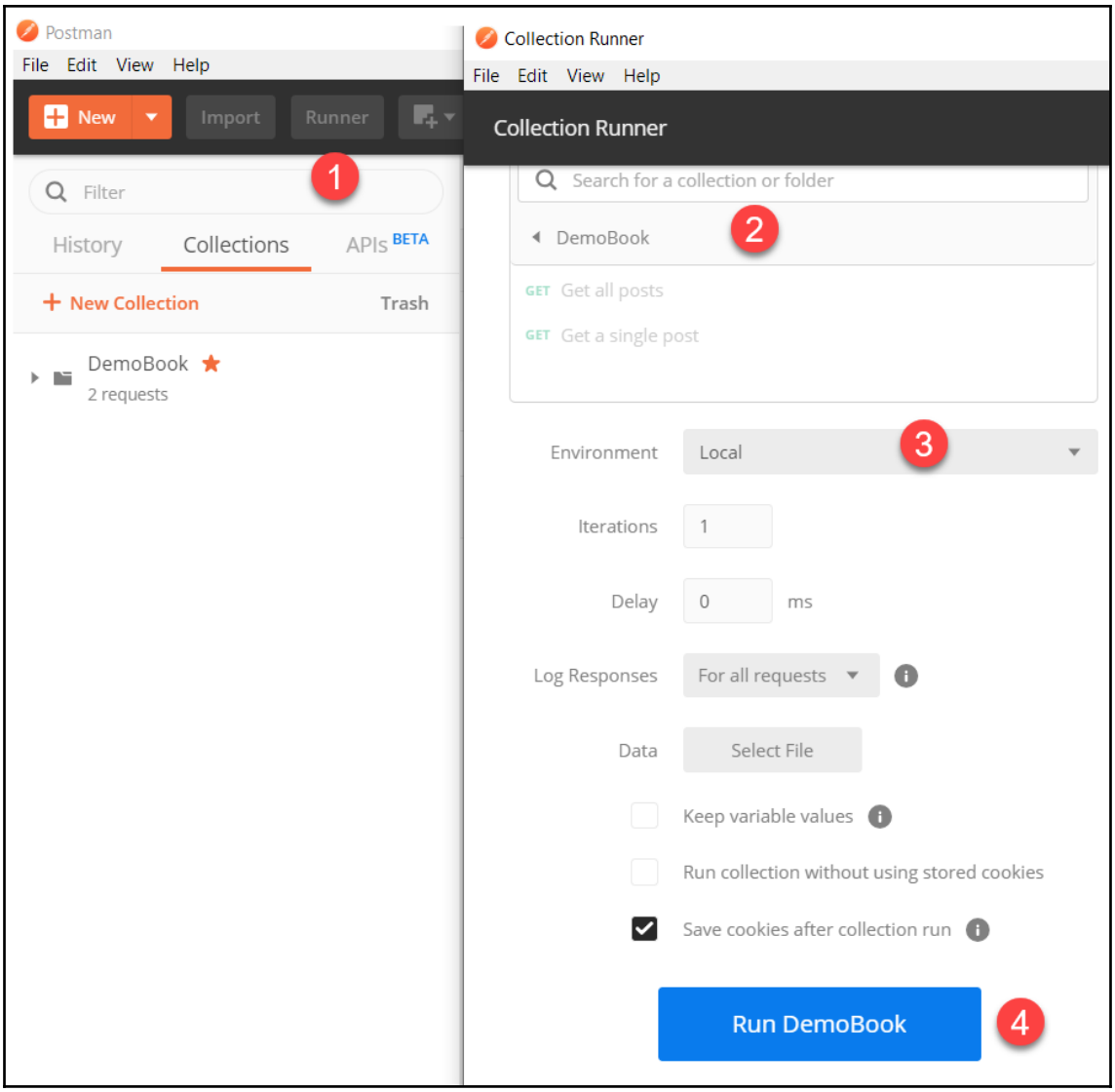

Get a single post
GET
https://jsonplaceholder.typicode.com/posts/{{PostID}}
Params
Authorization
Headers (8)
Body
Pre-request Script
Tests
Settings
1 pm.test("Status code is 200", function () {
2 pm.response.to.have.status(200);
3 });
4
5 pm.test("Response time is less than 400ms", function () {
6 pm.expect(pm.response.responseTime).to.be.below(400);
7 });
8
9 pm.test("Json response is not empty", function (){
10 pm.expect(pm.response).to.be.json;
11 });
12
13 pm.test("Json response userId eq 1", function (){
14 var jsonRes = pm.response.json();
15 pm.expect(jsonRes.userId).to.eq(1);
16 });
17

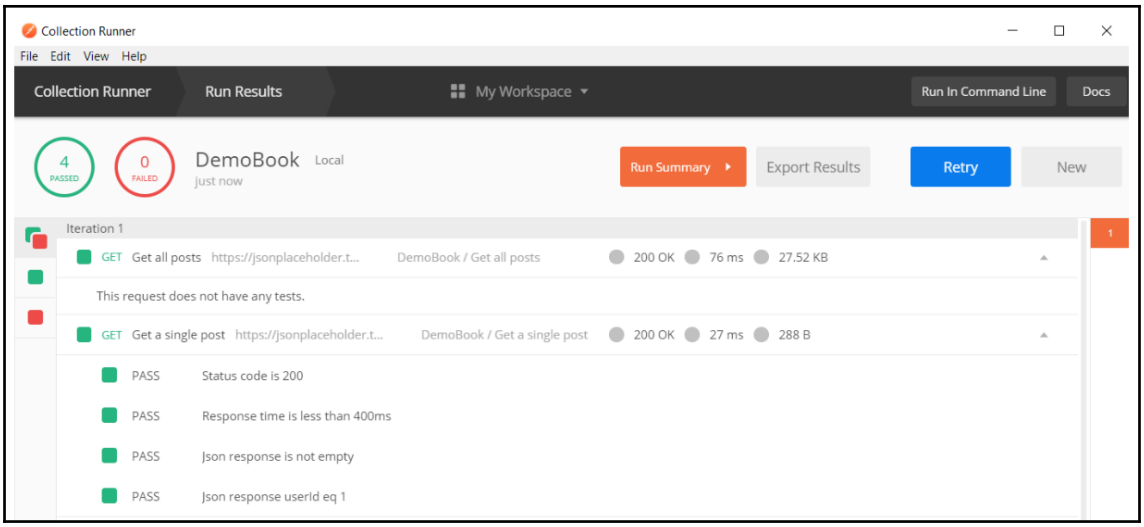

GET Get a single post
1
Local
Get a single post
Examples (0)
GET
https://jsonplaceholder.typicode.com/posts/{{PostID}}
2
Send
Save
Params
Authorization
Headers (8)
Body
Pre-request Script
Tests
Settings
Cookies
Code
Comments (0)


GET
https://jsonplaceholder.typicode.com/posts/{{PostID}}
Send
Save
Params
Authorization
Headers (8)
Body
Pre-request Script
Tests
Settings
Cookies
Code
Comments (0)
Query Params
KEY
VALUE
DESCRIPTION
Bulk Edit
Key
Value
Description
Body
Cookies (1)
Headers (19)
Test Results (4/4)
Status: 200 OK
Time: 23ms
Size: 932 B
Save Response
1
Pretty
Raw
Preview
Visualize BETA
JSON
2
3
{
"userId": 1,
"id": 6,
"title": "dolorem eum magni eos aperiam quia",
"body": "ut aspernatur corporis harum nihil quis provident sequi\nmollitia nobis aliquid molestiae\nperspiciatis et ea nemo ab reprehenderit accusantium quas\nvoluptate dolores velit et doloremque molestiae"
}


KEY
VALUE
DESCRIPTION
Bulk Edit
Key
Value
Description
Body
Cookies (1)
Headers (19)
Test Results (4/4)
1
Status: 200 OK
Time: 23ms
Size: 932 B
Save Response
All
Passed
Skipped
Failed
PASS
Status code is 200
PASS
Response time is less than 400ms
PASS
Json response is not empty
PASS
Json response userId eq 1
2

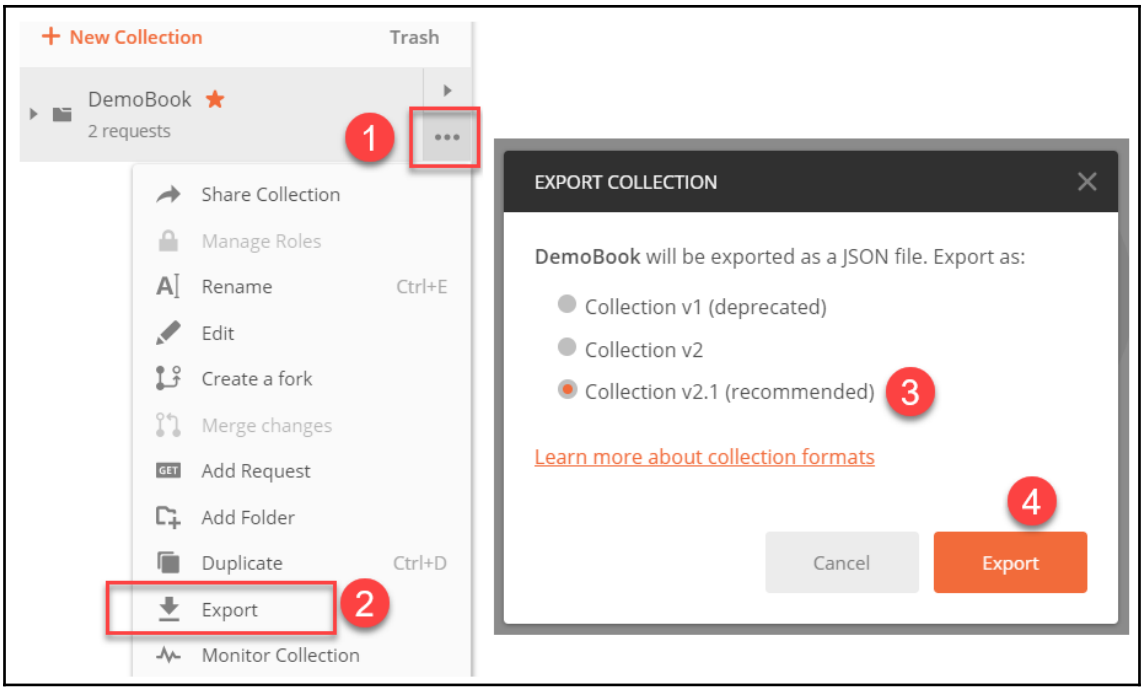

Body
Cookies (1)
Headers (19)
Test Results (3/4)
All
Passed
Skipped
Failed
PASS
Status code is 200
PASS
Response time is less than 400ms
PASS
Json response is not empty
FAIL
Json response userId eq 1 | AssertionError: expected 1 to equal 10

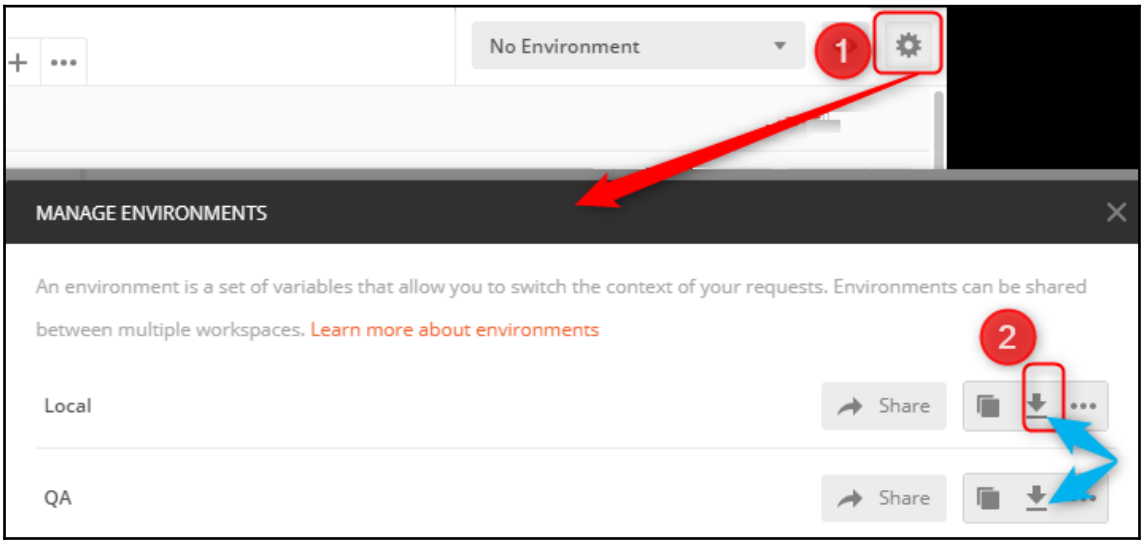

Postman
File Edit View Help
New
Import
Runner
1
Filter
History
Collections
APIs BETA
New Collection
Trash
DemoBook
2 requests
Collection Runner
File Edit View Help
Collection Runner
Search for a collection or folder
DemoBook
2
GET Get all posts
GET Get a single post
Environment
Local
3
Iterations
1
Delay
0
ms
Log Responses
For all requests
Data
Select File
Keep variable values
Run collection without using stored cookies
Save cookies after collection run
Run DemoBook
4

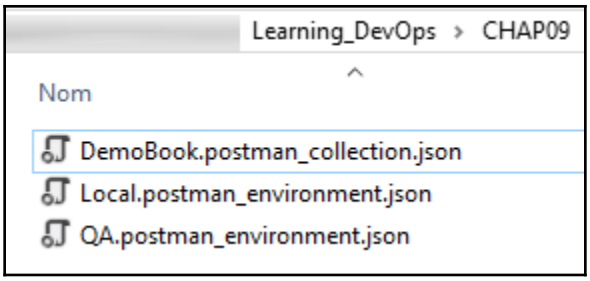



```
                >npm install -g newman
                \AppData\Roaming\npm\newman -> C:\Users\MikaelKRIEF\AppData\Roaming\npm\node_modules\newman\bin\newman.js
+ newman@4.5.1
added 152 packages from 191 contributors in 13.755s
```

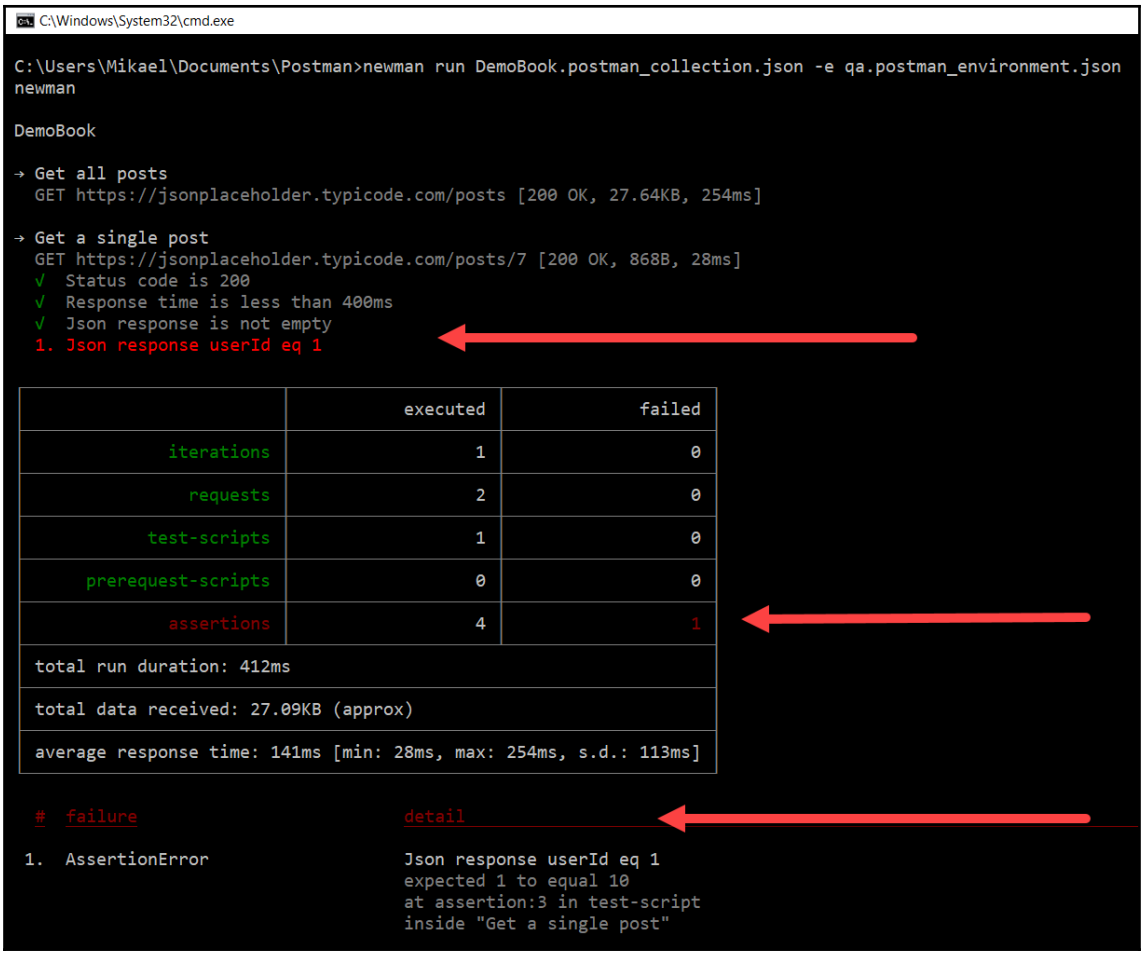
```
                >newman --help
Usage: newman [options] [command]

Options:
  -v, --version                output the version number
  -h, --help                   output usage information

Commands:
  run [options] <collection>  URL or path to a Postman Collection.

To get available options for a command:
  newman [command] -h
```

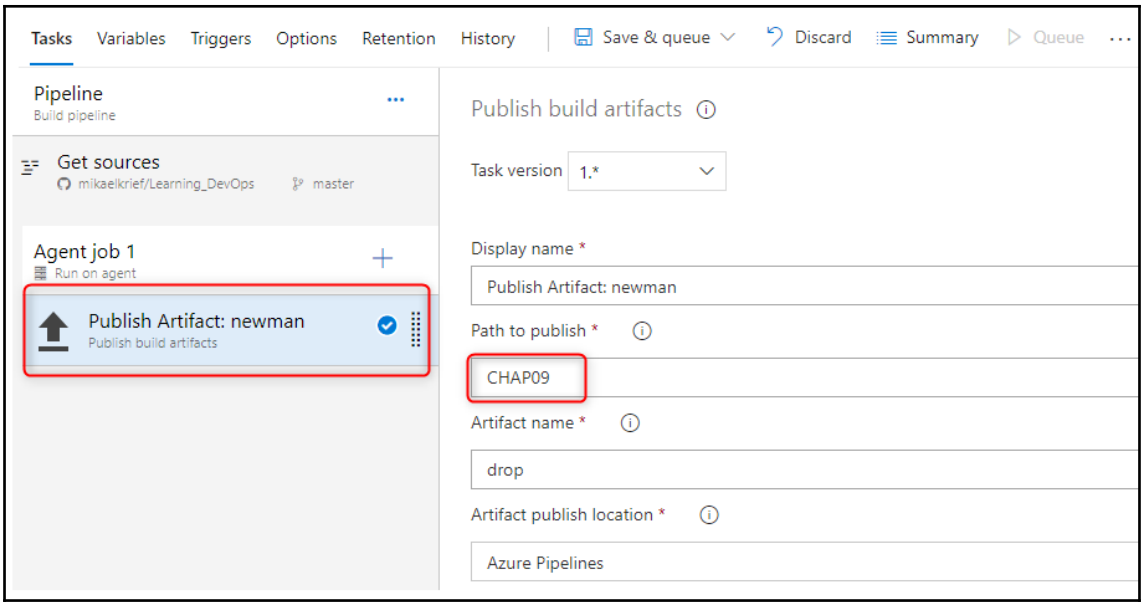

New Collection
Trash
DemoBook
2 requests
1
Share Collection
Manage Roles
Rename
Ctrl+E
Edit
Create a fork
Merge changes
Add Request
Add Folder
Duplicate
Ctrl+D
Export
2
Monitor Collection
EXPORT COLLECTION
DemoBook will be exported as a JSON file. Export as:
Collection v1 (deprecated)
Collection v2
Collection v2.1 (recommended)
3
Learn more about collection formats
4
Cancel
Export

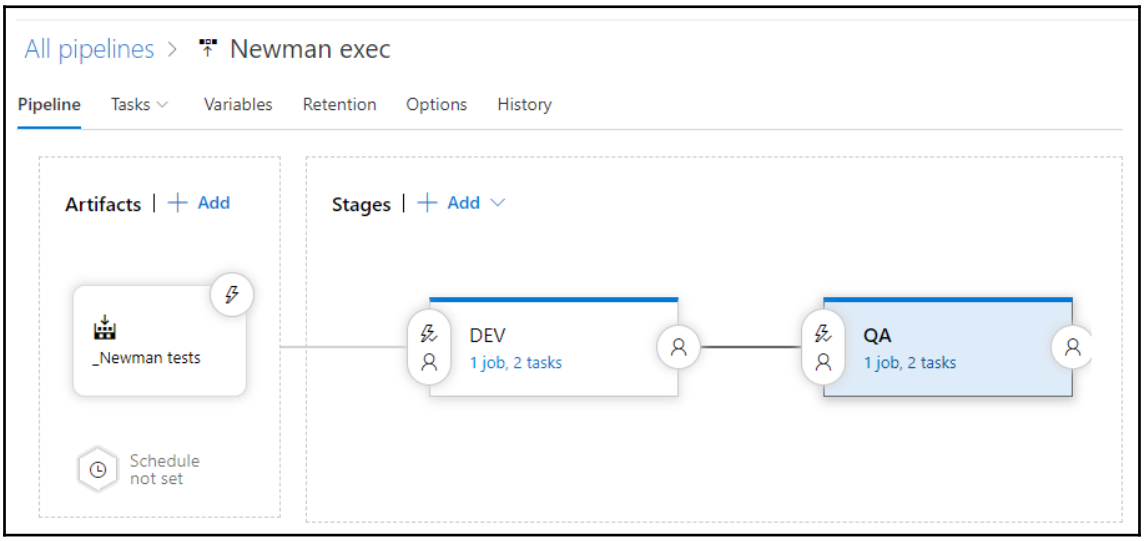

No Environment
1
MANAGE ENVIRONMENTS
An environment is a set of variables that allow you to switch the context of your requests. Environments can be shared between multiple workspaces. Learn more about environments
2
Local
Share
QA
Share

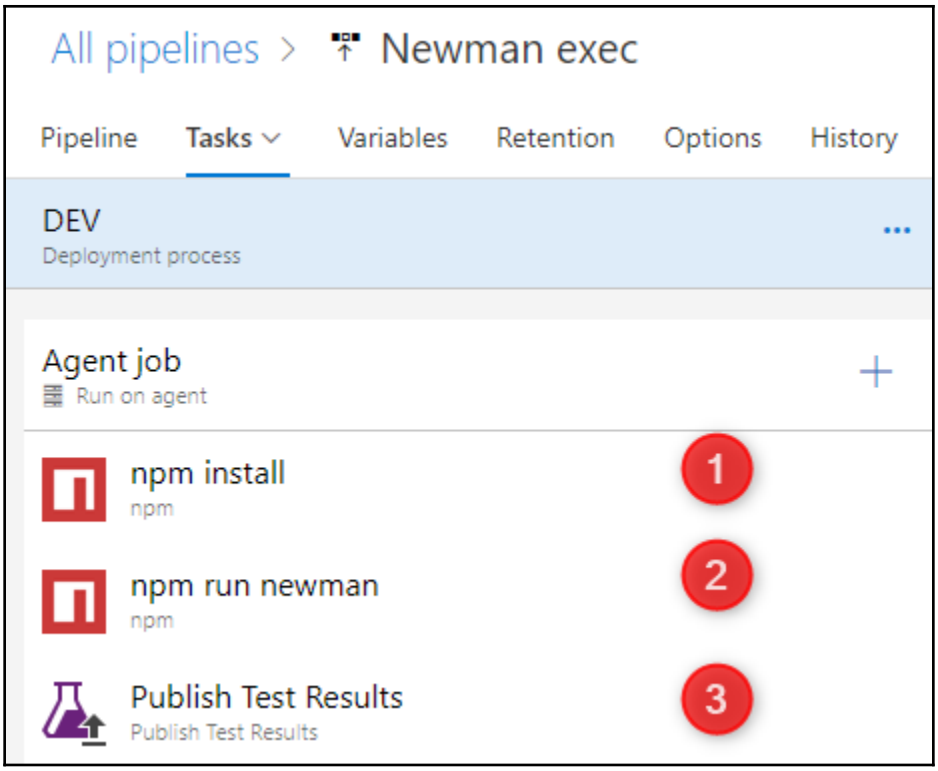


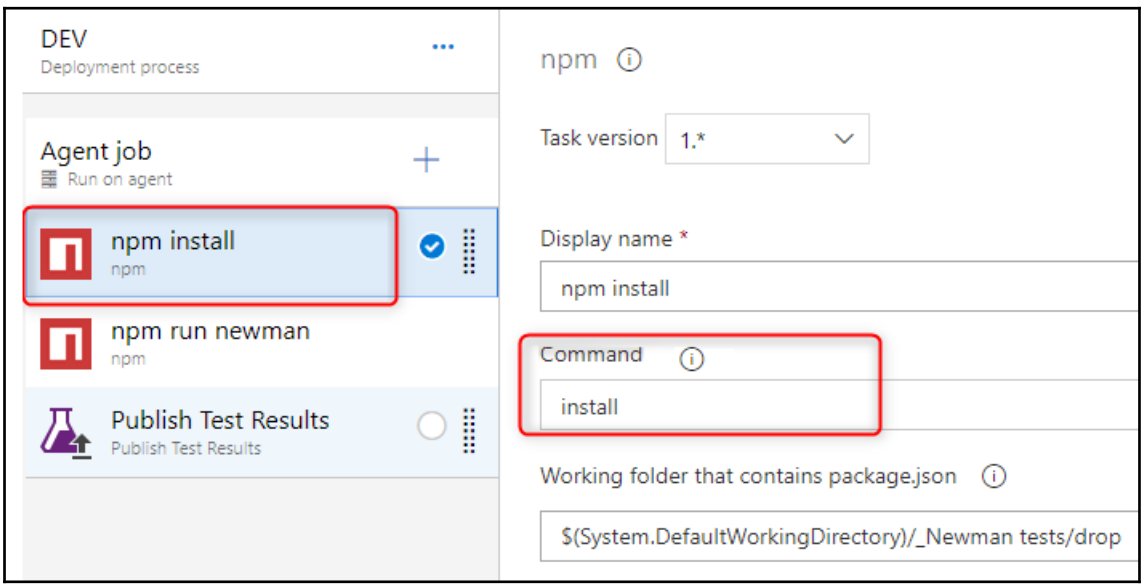

```
C:\Windows\System32\cmd.exe

C:\Users\Mikael\Documents\Postman>newman run DemoBook.postman_collection.json -e Local.postman_environment.json
newman

DemoBook

→ Get all posts
  GET https://jsonplaceholder.typicode.com/posts [200 OK, 27.64KB, 194ms]

→ Get a single post
  GET https://jsonplaceholder.typicode.com/posts/6 [200 OK, 932B, 27ms]
  √  Status code is 200
  √  Response time is less than 400ms
  √  Json response is not empty
  √  Json response userId eq 1

┌─────────────────────────┬──────────┬──────────┐
│                         │ executed │   failed │
├─────────────────────────┼──────────┼──────────┤
│              iterations │        1 │        0 │
├─────────────────────────┼──────────┼──────────┤
│                requests │        2 │        0 │
├─────────────────────────┼──────────┼──────────┤
│            test-scripts │        1 │        0 │
├─────────────────────────┼──────────┼──────────┤
│      prerequest-scripts │        0 │        0 │
├─────────────────────────┼──────────┼──────────┤
│              assertions │        4 │        0 │
├─────────────────────────┴──────────┴──────────┤
│ total run duration: 338ms                     │
├───────────────────────────────────────────────┤
│ total data received: 27.16KB (approx)         │
├───────────────────────────────────────────────┤
│ average response time: 110ms [min: 27ms, max: 194ms, s.d.: 83ms] │
└───────────────────────────────────────────────┘
```

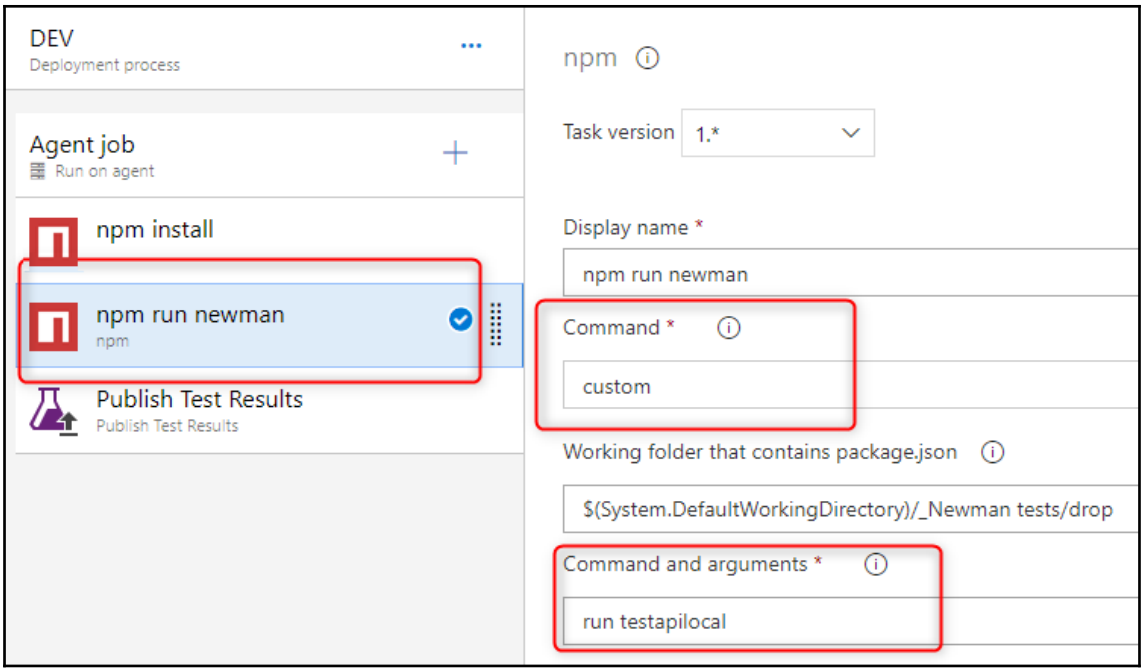

C:\Windows\System32\cmd.exe
C:\Users\Mikael\Documents\Postman>newman run DemoBook.postman_collection.json -e qa.postman_environment.json
newman
DemoBook
→ Get all posts
GET https://jsonplaceholder.typicode.com/posts [200 OK, 27.64KB, 254ms]
→ Get a single post
GET https://jsonplaceholder.typicode.com/posts/7 [200 OK, 868B, 28ms]
√ Status code is 200
√ Response time is less than 400ms
√ Json response is not empty
1. Json response userId eq 1
executed
failed
iterations
1
0
requests
2
0
test-scripts
1
0
prerequest-scripts
0
0
assertions
4
1
total run duration: 412ms
total data received: 27.09KB (approx)
average response time: 141ms [min: 28ms, max: 254ms, s.d.: 113ms]
failure
detail
1. AssertionError
Json response userId eq 1
expected 1 to equal 10
at assertion:3 in test-script
inside "Get a single post"

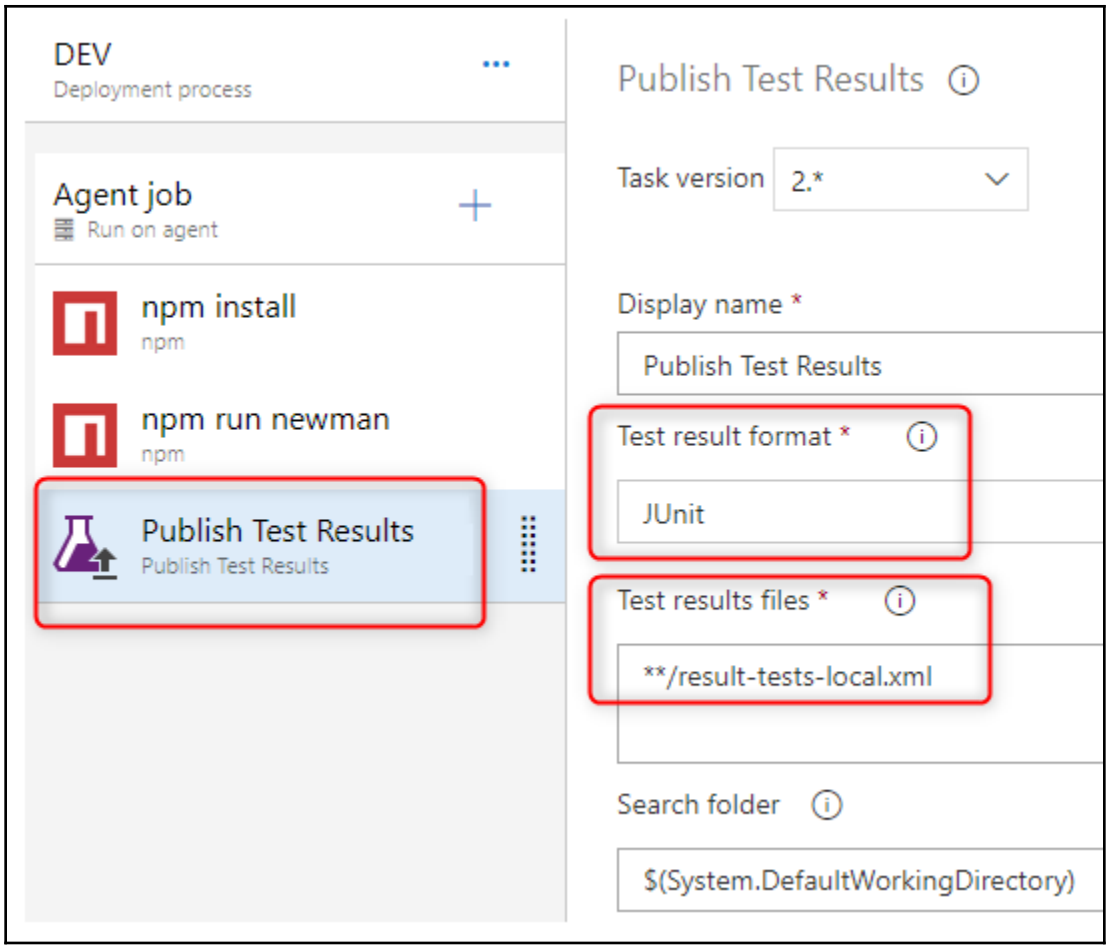

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Summary
Queue
Pipeline
Build pipeline
Get sources
mikaelkrief/Learning_DevOps
master
Agent job 1
Run on agent
Publish Artifact: newman
Publish build artifacts
Publish build artifacts
Task version
1.*
Display name *
Publish Artifact: newman
Path to publish *
CHAP09
Artifact name *
drop
Artifact publish location *
Azure Pipelines

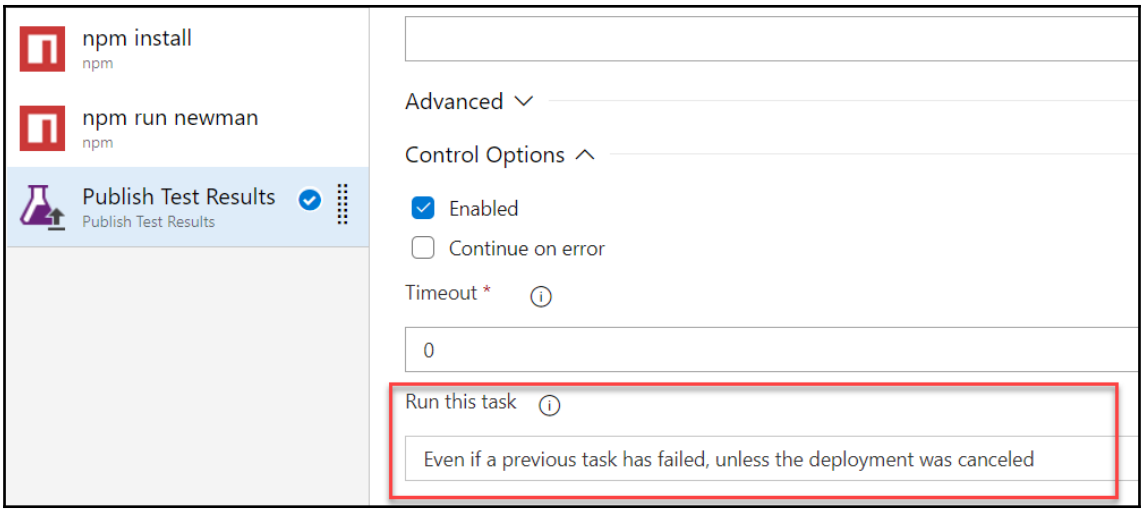

All pipelines
Newman exec
Pipeline
Tasks
Variables
Retention
Options
History
Artifacts
Add
_Newman tests
Schedule not set
Stages
Add
DEV
1 job, 2 tasks
QA
1 job, 2 tasks

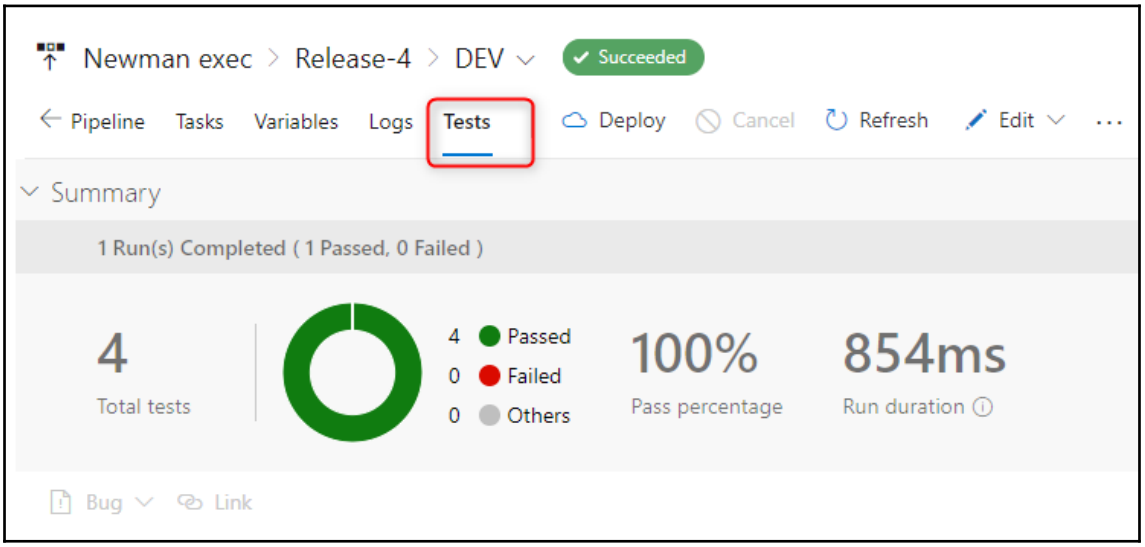

All pipelines
Newman exec
Pipeline
Tasks
Variables
Retention
Options
History
DEV
Deployment process
Agent job
Run on agent
npm install
npm
1
npm run newman
npm
2
Publish Test Results
Publish Test Results
3

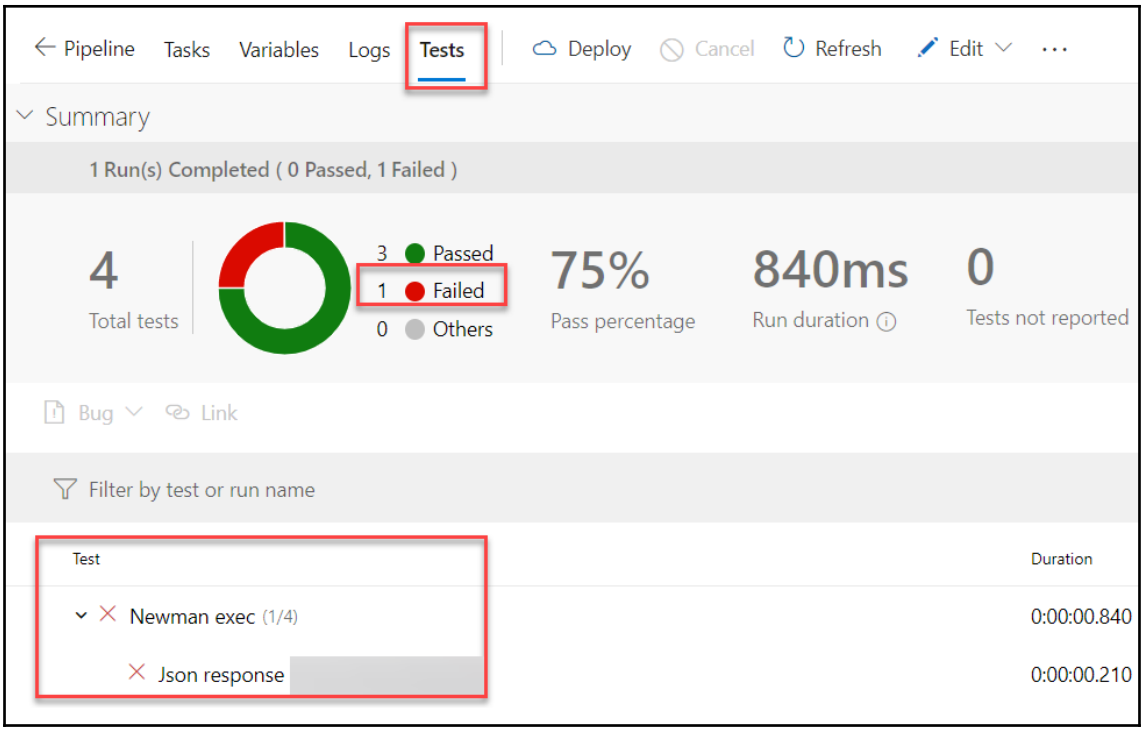

DEV
Deployment process
Agent job
Run on agent
npm install
npm
npm run newman
npm
Publish Test Results
Publish Test Results
npm
Task version
1.*
Display name *
npm install
Command
install
Working folder that contains package.json
$(System.DefaultWorkingDirectory)/_Newman tests/drop


DEV
Deployment process
Agent job
Run on agent
npm install
npm run newman
npm
Publish Test Results
Publish Test Results
npm
Task version
1.*
Display name *
npm run newman
Command *
custom
Working folder that contains package.json
$(System.DefaultWorkingDirectory)/_Newman tests/drop
Command and arguments *
run testapilocal

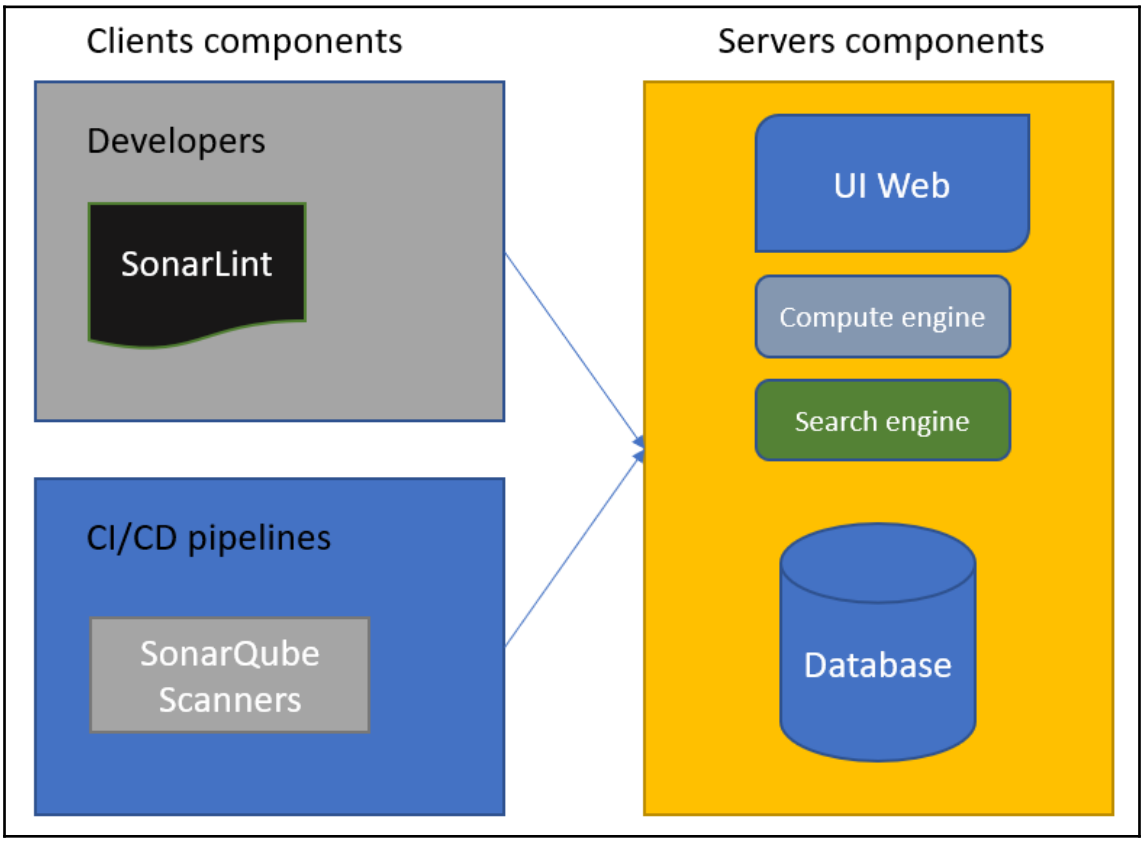

DEV
Deployment process
Agent job
Run on agent
npm install
npm
npm run newman
npm
Publish Test Results
Publish Test Results
Publish Test Results
Task version
2.*
Display name *
Publish Test Results
Test result format *
JUnit
Test results files *
**/result-tests-local.xml
Search folder
$(System.DefaultWorkingDirectory)


npm install
npm
npm run newman
npm
Publish Test Results
Publish Test Results
Advanced
Control Options
Enabled
Continue on error
Timeout *
0
Run this task
Even if a previous task has failed, unless the deployment was canceled


Newman exec
Release-4
DEV
Succeeded
Pipeline
Tasks
Variables
Logs
Tests
Deploy
Cancel
Refresh
Edit
Summary
1 Run(s) Completed (1 Passed, 0 Failed)
4
Total tests
4 Passed
0 Failed
0 Others
100%
Pass percentage
854ms
Run duration
Bug
Link


Pipeline
Tasks
Variables
Logs
Tests
Deploy
Cancel
Refresh
Edit
Summary
1 Run(s) Completed (0 Passed, 1 Failed)
4
Total tests
3 Passed
1 Failed
0 Others
75%
Pass percentage
840ms
Run duration
0
Tests not reported
Bug
Link
Filter by test or run name
Test
Duration
Newman exec (1/4)
0:00:00.840
Json response
0:00:00.210

Chapter 10: Static Code Analysis with SonarQube



SonarQube Certified by Bitnami

Save for later

Bitnami

Create | Start with a pre-set configuration

Want to deploy programmatically? Get started

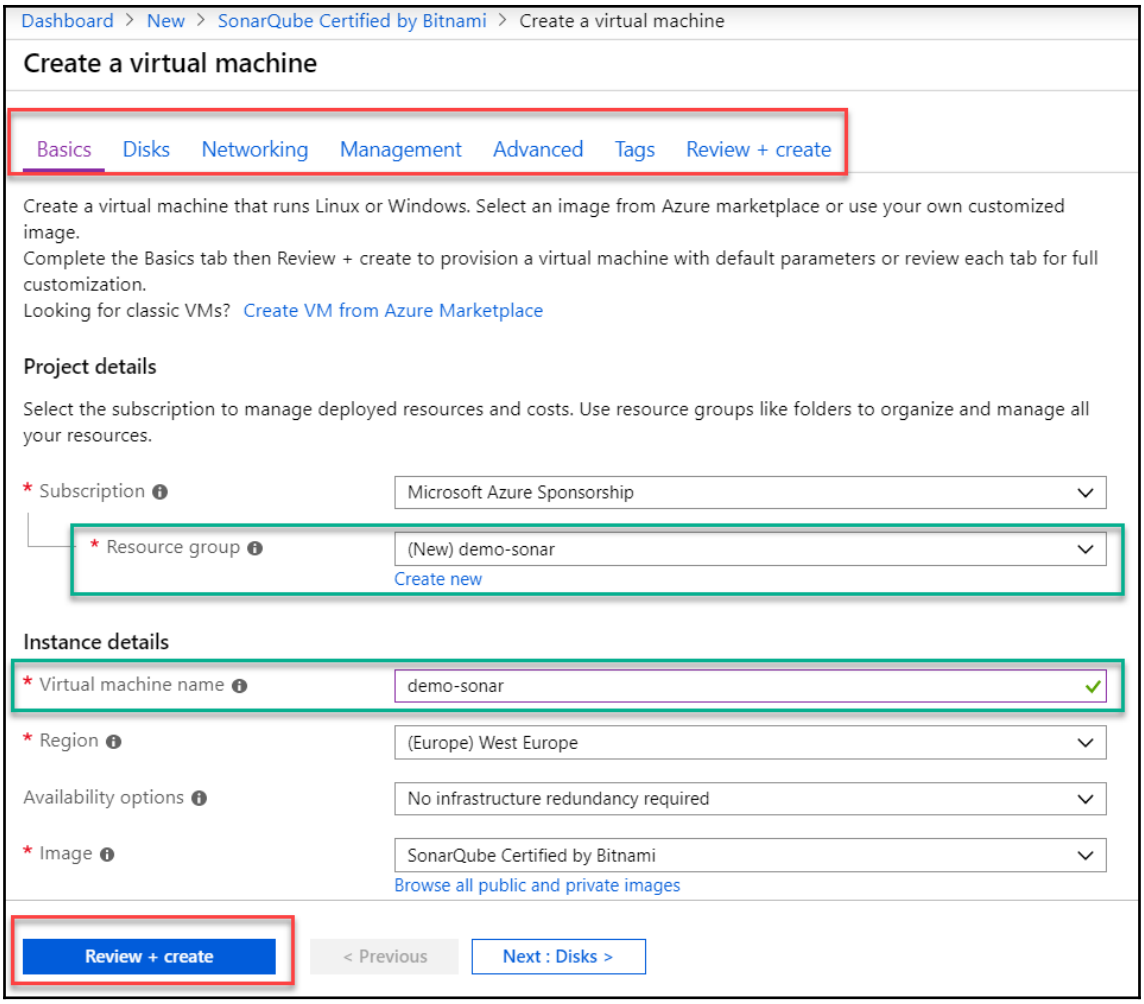
SonarQube is an open source tool for continuous code quality which performs automatic reviews of code to detect bugs, code smells and vulnerability issues for 20+ programming languages such as Java, C#, JavaScript, C/C++ and PHP. It tracks statistics and creates charts that enable developers to quickly identify problem areas in their code.

SonarQube is a proprietary trademark belonging to SonarSource SA. SonarSource SA creates solutions for code quality: SonarQube, SonarCloud, and SonarLint, as well as their own code analyzers and governance solutions.

Why use Bitnami Certified Apps?

Bitnami certified images are always up-to-date, secure, and built to work right out of the box.

Bitnami packages applications following industry standards, and continuously monitors all components and libraries for vulnerabilities and application updates. When any security threat or update is identified, Bitnami automatically repackages the applications and pushes the latest versions to the cloud marketplaces.


Dashboard > New > SonarQube Certified by Bitnami > Create a virtual machine
Create a virtual machine
Basics
Disks
Networking
Management
Advanced
Tags
Review + create
Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image.
Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization.
Looking for classic VMs? Create VM from Azure Marketplace
Project details
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
* Subscription
Microsoft Azure Sponsorship
* Resource group
(New) demo-sonar
Create new
Instance details
* Virtual machine name
demo-sonar
* Region
(Europe) West Europe
Availability options
No infrastructure redundancy required
* Image
SonarQube Certified by Bitnami
Browse all public and private images
Review + create
< Previous
Next : Disks >

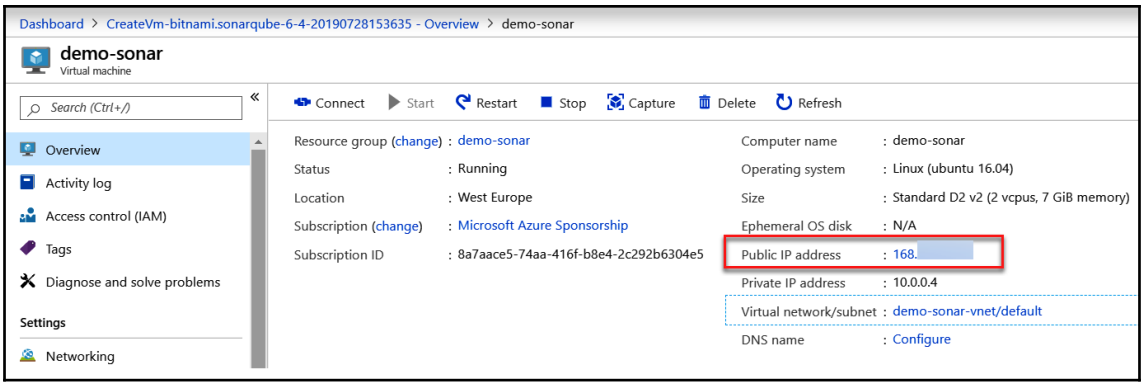
Your deployment is complete

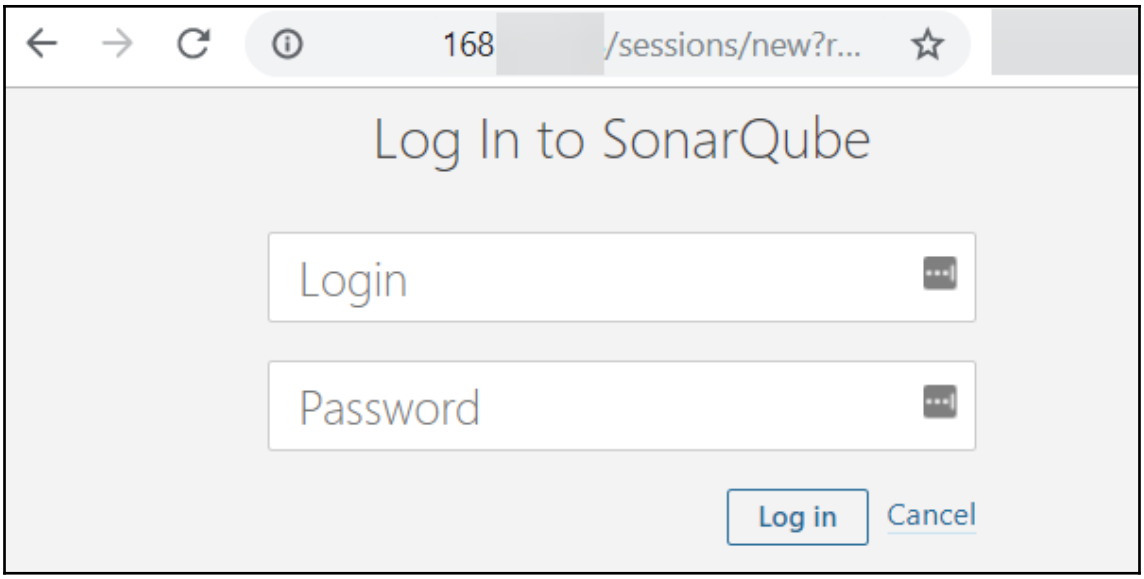
Deployment name: CreateVm-bitnami.sonarqube-6-4-2019072815...
Subscription: Microsoft Azure Sponsorship
Resource group: demo-sonar

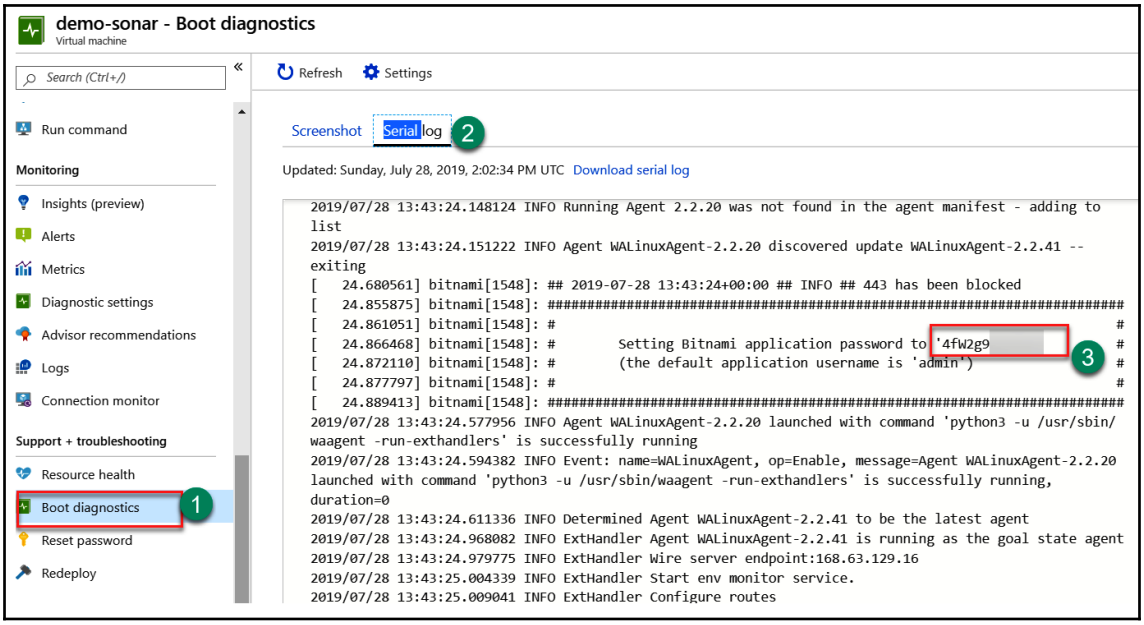
Start time: 7/28/2019, 3:40:26 PM
Correlation ID: 6bfacfb4-78eb-4e07-8f79-8

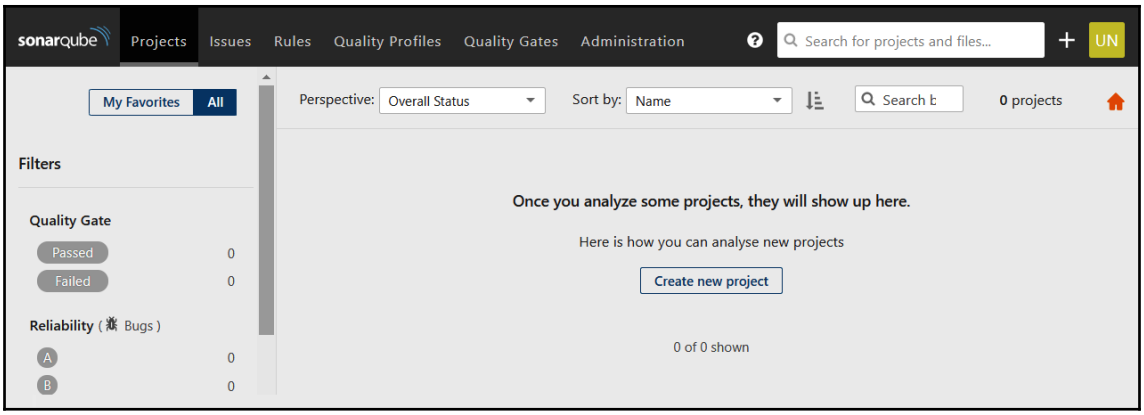
Deployment details (Download)

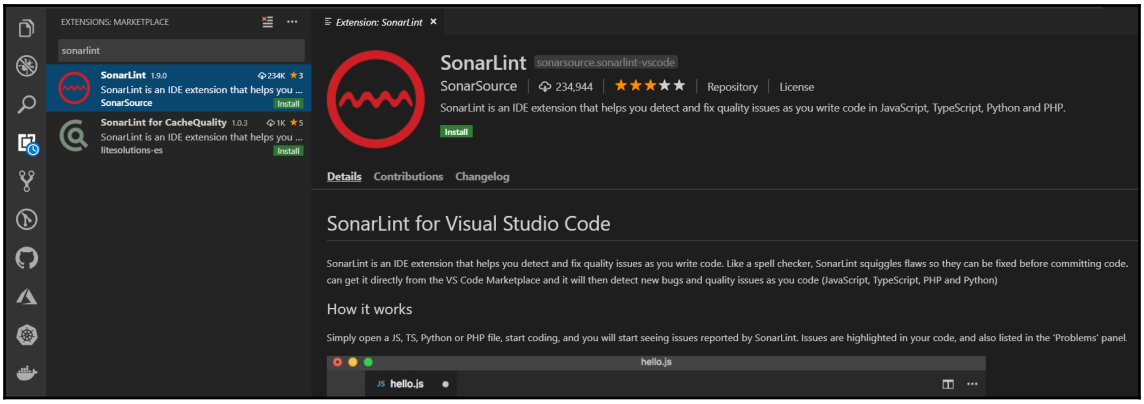
RESOURCE	TYPE	STATUS	OPERATION DETAILS
demo-sonar	Microsoft.Compute/virt...	OK	Operation details
demo-sonar592	Microsoft.Network/netw...	Created	Operation details
demosonardiag	Microsoft.Storage/stora...	OK	Operation details
demo-sonar-vnet	Microsoft.Network/virtu...	OK	Operation details
demo-sonar-nsg	Microsoft.Network/netw...	OK	Operation details
demo-sonar-ip	Microsoft.Network/publ...	OK	Operation details

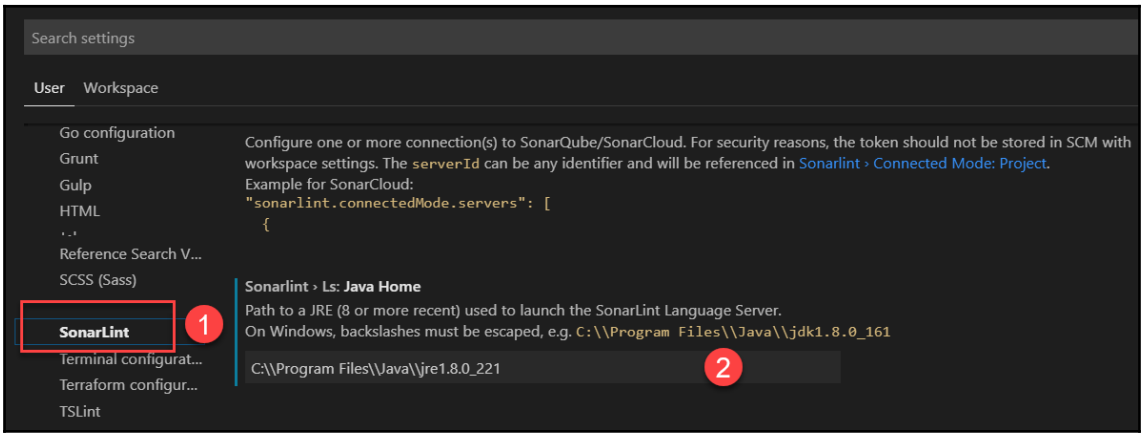



168 /sessions/new?r...
Log In to SonarQube
Login
Password
Log in
Cancel

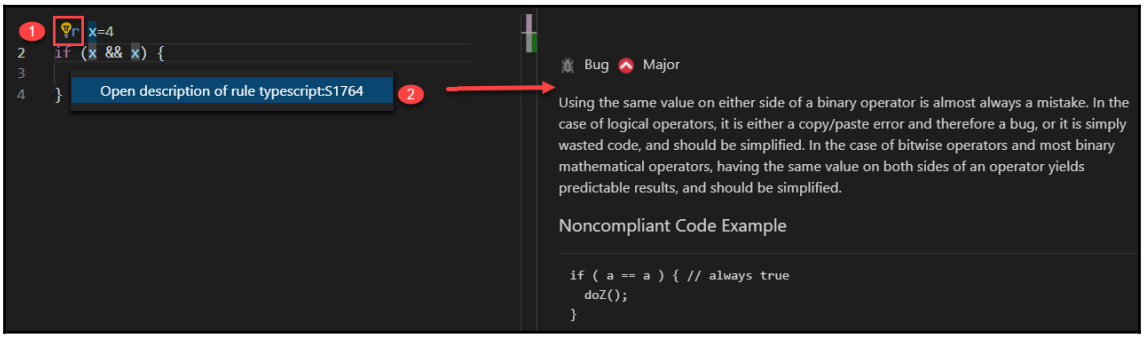

demo-sonar - Boot diagnostics
Virtual machine
Search (Ctrl+/)
Refresh
Settings
Run command
Monitoring
Insights (preview)
Alerts
Metrics
Diagnostic settings
Advisor recommendations
Logs
Connection monitor
Support + troubleshooting
Resource health
Boot diagnostics
Reset password
Redeploy
Screenshot
Serial log
Updated: Sunday, July 28, 2019, 2:02:34 PM UTC Download serial log
2019/07/28 13:43:24.148124 INFO Running Agent 2.2.20 was not found in the agent manifest - adding to list
2019/07/28 13:43:24.151222 INFO Agent WALinuxAgent-2.2.20 discovered update WALinuxAgent-2.2.41 -- exiting
[24.680561] bitnami[1548]: ## 2019-07-28 13:43:24+00:00 ## INFO ## 443 has been blocked
[24.855875] bitnami[1548]: ##########
[24.861051] bitnami[1548]: #
[24.866468] bitnami[1548]: # Setting Bitnami application password to '4fW2g9
[24.872110] bitnami[1548]: # (the default application username is 'admin')
[24.877797] bitnami[1548]: #
[24.889413] bitnami[1548]: ##########
2019/07/28 13:43:24.577956 INFO Agent WALinuxAgent-2.2.20 launched with command 'python3 -u /usr/sbin/waagent -run-exthandlers' is successfully running
2019/07/28 13:43:24.594382 INFO Event: name=WALinuxAgent, op=Enable, message=Agent WALinuxAgent-2.2.20 launched with command 'python3 -u /usr/sbin/waagent -run-exthandlers' is successfully running, duration=0
2019/07/28 13:43:24.611336 INFO Determined Agent WALinuxAgent-2.2.41 to be the latest agent
2019/07/28 13:43:24.968082 INFO ExtHandler Agent WALinuxAgent-2.2.41 is running as the goal state agent
2019/07/28 13:43:24.979775 INFO ExtHandler Wire server endpoint:168.63.129.16
2019/07/28 13:43:25.004339 INFO ExtHandler Start env monitor service.
2019/07/28 13:43:25.009041 INFO ExtHandler Configure routes
1
2
3

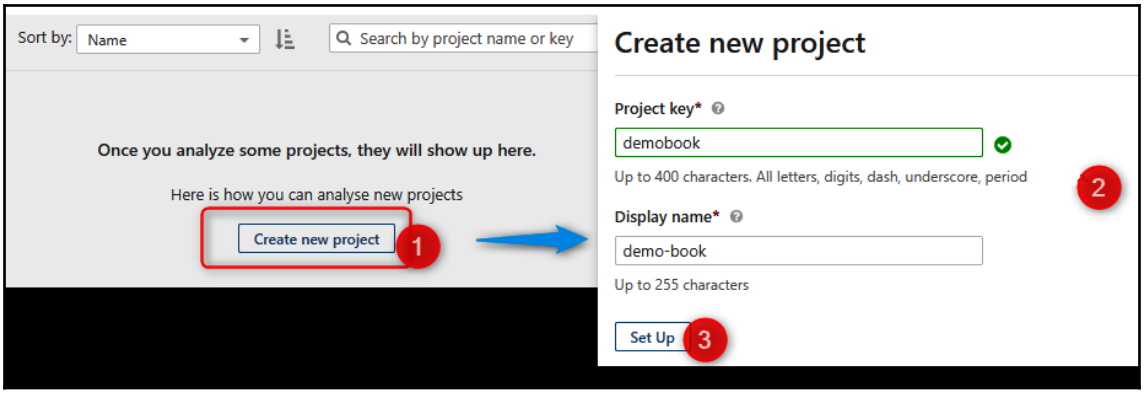

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Search for projects and files...
UN
My Favorites
All
Perspective:
Overall Status
Sort by:
Name
Search b
0 projects
Filters
Quality Gate
Passed
0
Failed
0
Reliability (Bugs)
A
0
B
0
Once you analyze some projects, they will show up here.
Here is how you can analyse new projects
Create new project
0 of 0 shown

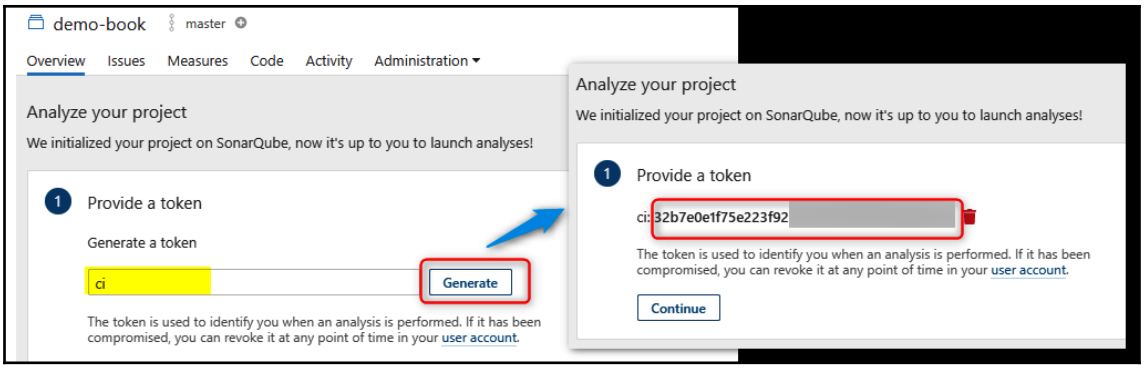

EXTENSIONS: MARKETPLACE
sonarlint
SonarLint 1.9.0
SonarLint is an IDE extension that helps you ...
SonarSource
Install
SonarLint for CacheQuality 1.0.3
SonarLint is an IDE extension that helps you ...
litesolutions-es
Install
Extension: SonarLint
SonarLint
sonarsource.sonarlint-vscode
SonarSource
234,944
Repository
License
SonarLint is an IDE extension that helps you detect and fix quality issues as you write code in JavaScript, TypeScript, Python and PHP.
Install
Details
Contributions
Changelog
SonarLint for Visual Studio Code
SonarLint is an IDE extension that helps you detect and fix quality issues as you write code. Like a spell checker, SonarLint squiggles flaws so they can be fixed before committing code. can get it directly from the VS Code Marketplace and it will then detect new bugs and quality issues as you code (JavaScript, TypeScript, PHP and Python)
How it works
Simply open a JS, TS, Python or PHP file, start coding, and you will start seeing issues reported by SonarLint. Issues are highlighted in your code, and also listed in the 'Problems' panel.
hello.js
hello.js

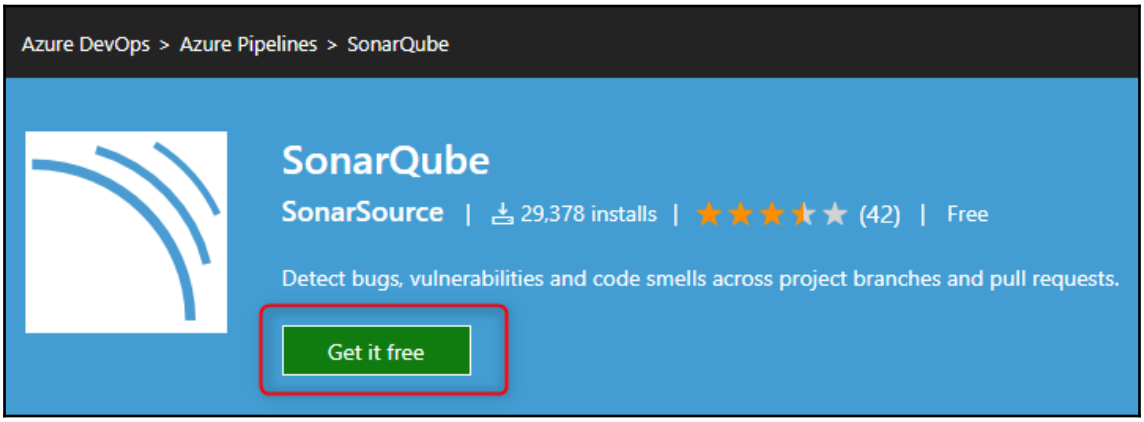

Search settings
User
Workspace
Go configuration
Grunt
Gulp
HTML
Reference Search V...
SCSS (Sass)
SonarLint
Terminal configurat...
Terraform configur...
TSLint
Configure one or more connection(s) to SonarQube/SonarCloud. For security reasons, the token should not be stored in SCM with workspace settings. The serverId can be any identifier and will be referenced in Sonarlint › Connected Mode: Project.
Example for SonarCloud:
"sonarlint.connectedMode.servers": [
{
Sonarlint › Ls: Java Home
Path to a JRE (8 or more recent) used to launch the SonarLint Language Server.
On Windows, backslashes must be escaped, e.g. C:\\Program Files\\Java\\jdk1.8.0_161
C:\\Program Files\\Java\\jre1.8.0_221
1
2

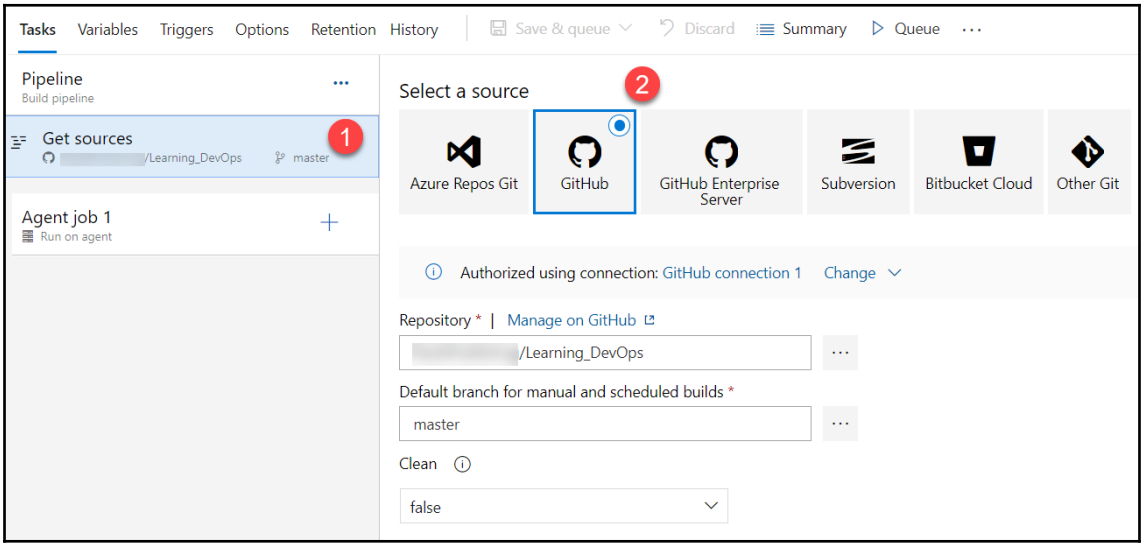
1 var x=4
2 if (x && x)
3
4 }
var x: number
Correct one of the identical sub-expressions on both sides of operator "&&" (typescript:S1764) sonarlint(typescript:S1764)
Quick Fix...
Peek Problem

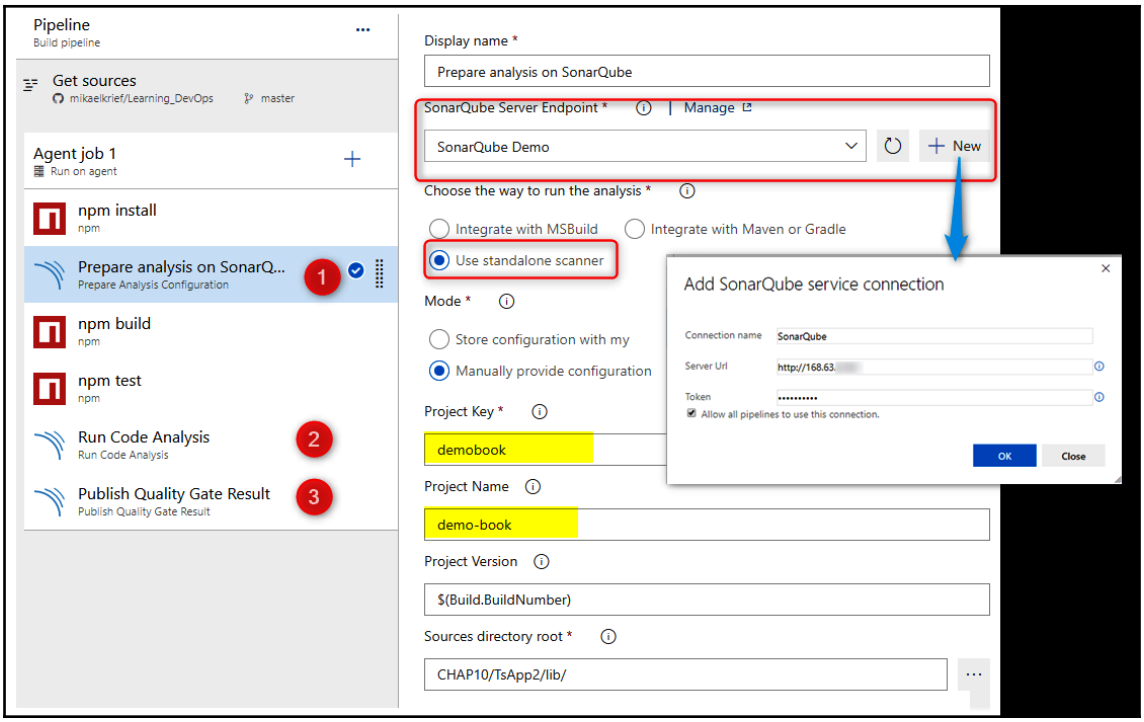

1
2 if (x && x) {
3
4 }
Open description of rule typescript:S1764
2
Bug
Major
Using the same value on either side of a binary operator is almost always a mistake. In the case of logical operators, it is either a copy/paste error and therefore a bug, or it is simply wasted code, and should be simplified. In the case of bitwise operators and most binary mathematical operators, having the same value on both sides of an operator yields predictable results, and should be simplified.
Noncompliant Code Example
if (a == a) { // always true
doZ();
}

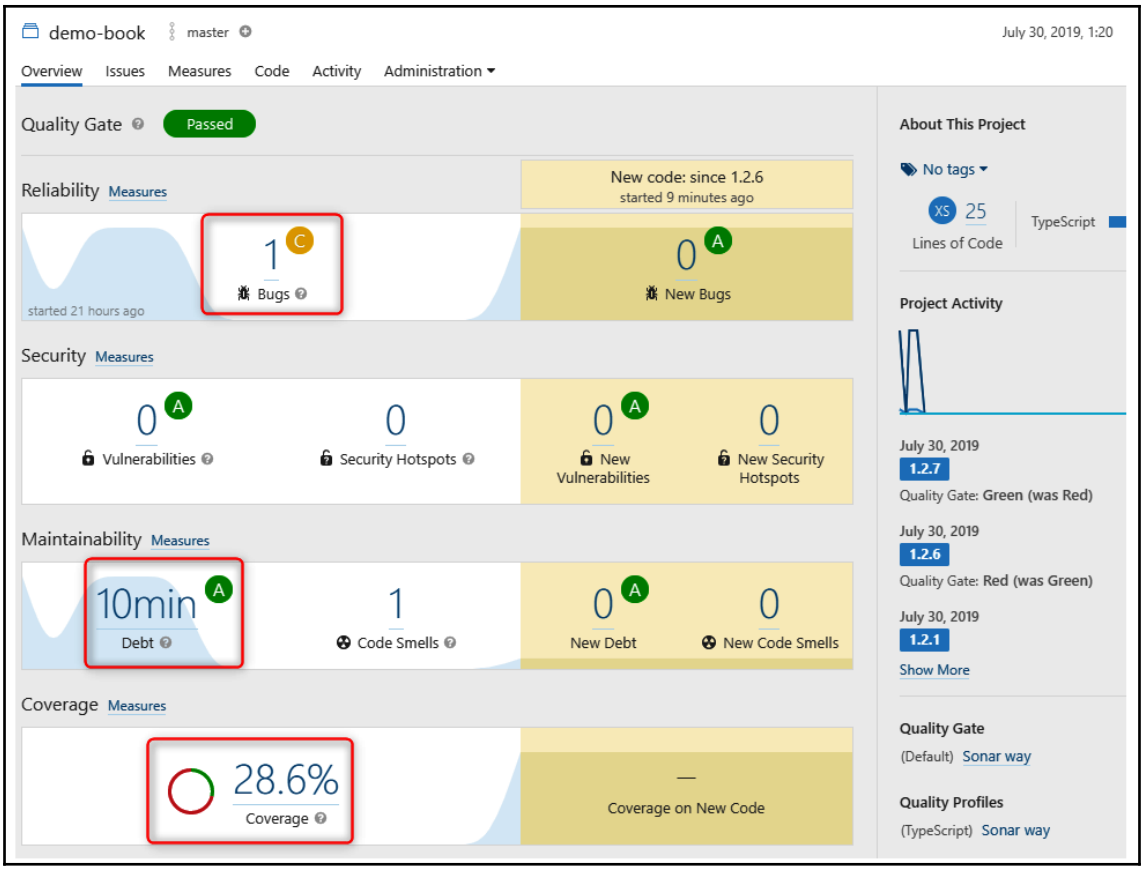

Sort by:
Name
Search by project name or key
Once you analyze some projects, they will show up here.
Here is how you can analyse new projects
Create new project
1
Create new project
Project key*
demobook
Up to 400 characters. All letters, digits, dash, underscore, period
2
Display name*
demo-book
Up to 255 characters
Set Up
3


demo-book
master
Overview
Issues
Measures
Code
Activity
Administration
Analyze your project
We initialized your project on SonarQube, now it's up to you to launch analyses!
1
Provide a token
Generate a token
ci
Generate
The token is used to identify you when an analysis is performed. If it has been compromised, you can revoke it at any point of time in your user account.
Analyze your project
We initialized your project on SonarQube, now it's up to you to launch analyses!
1
Provide a token
ci:32b7e0e1f75e223f92
The token is used to identify you when an analysis is performed. If it has been compromised, you can revoke it at any point of time in your user account.
Continue

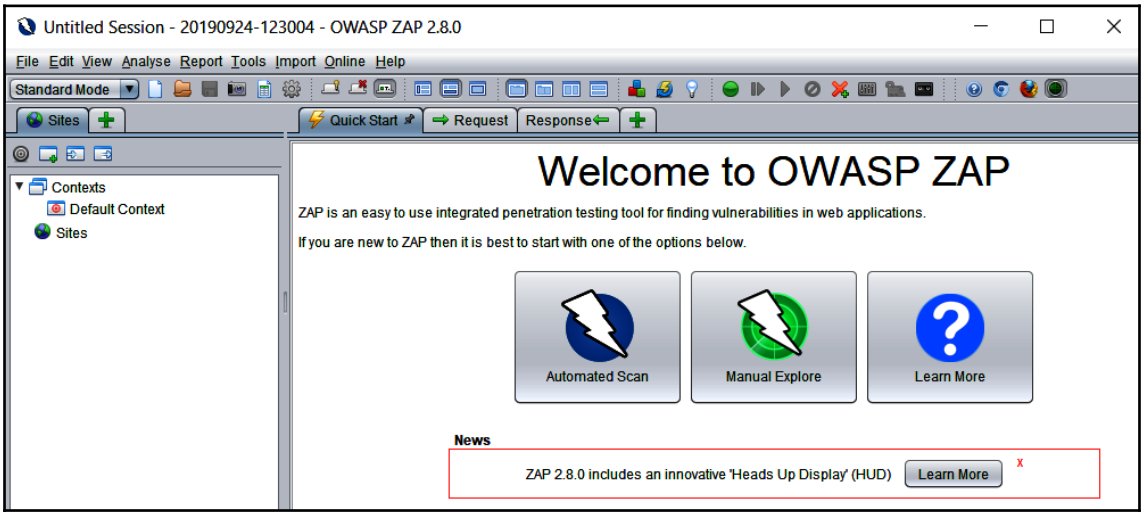

Azure DevOps > Azure Pipelines > SonarQube
SonarQube
SonarSource | 29,378 installs | (42) | Free
Detect bugs, vulnerabilities and code smells across project branches and pull requests.
Get it free

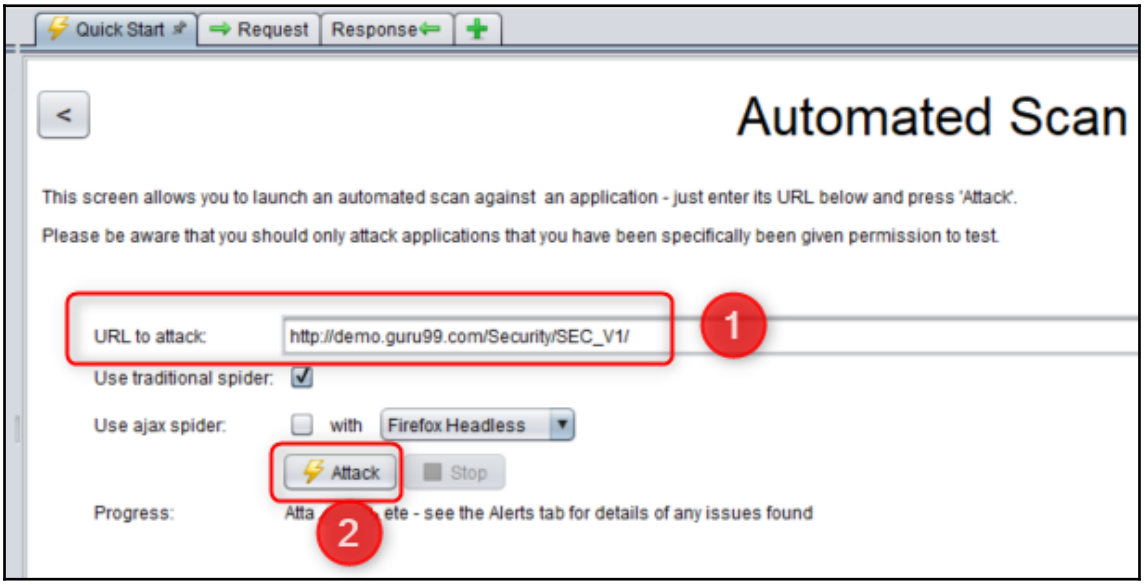

Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Discard
Summary
Queue
Pipeline
Build pipeline
Get sources
/Learning_DevOps
master
1
Agent job 1
Run on agent
Select a source
2
Azure Repos Git
GitHub
GitHub Enterprise Server
Subversion
Bitbucket Cloud
Other Git
Authorized using connection: GitHub connection 1
Change
Repository * | Manage on GitHub
/Learning_DevOps
Default branch for manual and scheduled builds *
master
Clean
false

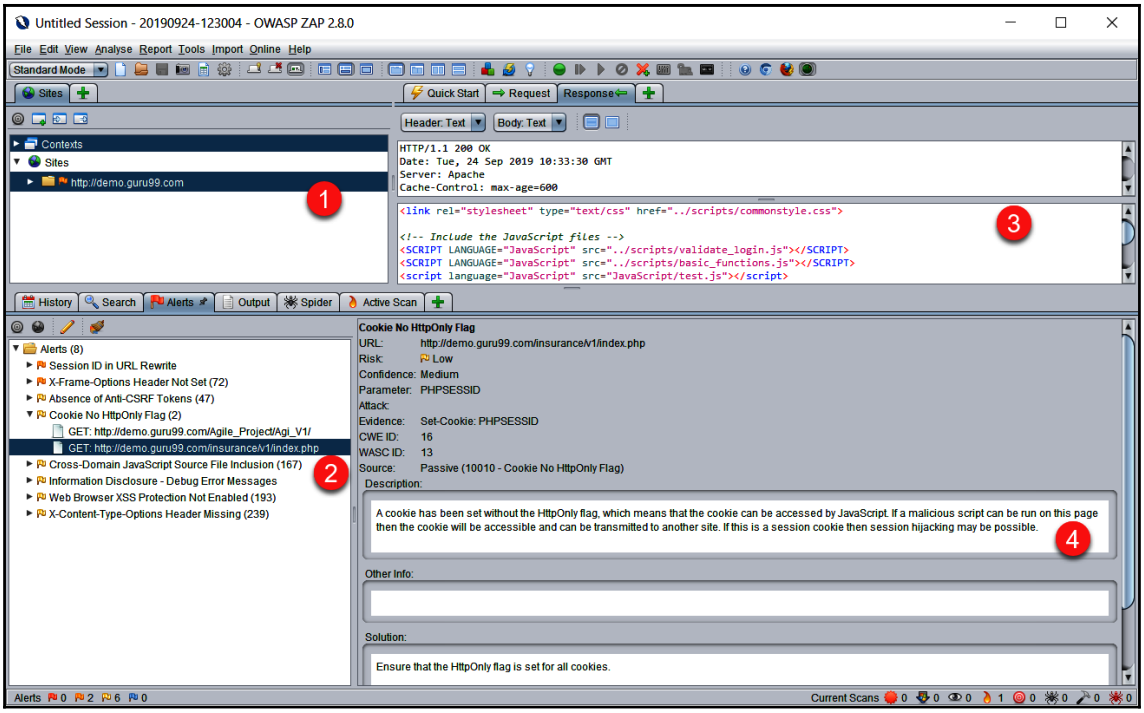

Pipeline
Build pipeline
Get sources
mikaelkrief/Learning_DevOps
master
Agent job 1
Run on agent
npm install
npm
Prepare analysis on SonarQ...
Prepare Analysis Configuration
1
npm build
npm
npm test
npm
Run Code Analysis
Run Code Analysis
2
Publish Quality Gate Result
Publish Quality Gate Result
3
Display name *
Prepare analysis on SonarQube
SonarQube Server Endpoint *
Manage
SonarQube Demo
New
Choose the way to run the analysis *
Integrate with MSBuild
Integrate with Maven or Gradle
Use standalone scanner
Mode *
Store configuration with my
Manually provide configuration
Project Key *
demobook
Project Name
demo-book
Project Version
$(Build.BuildNumber)
Sources directory root *
CHAP10/TsApp2/lib/
Add SonarQube service connection
Connection name
SonarQube
Server Url
http://168.63.
Token
Allow all pipelines to use this connection.
OK
Close

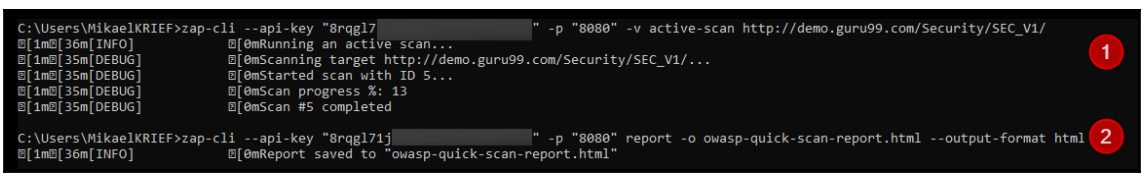

demo-book
master
July 30, 2019, 1:20
Overview
Issues
Measures
Code
Activity
Administration
Quality Gate
Passed
Reliability
Measures
New code: since 1.2.6
started 9 minutes ago
1
C
Bugs
started 21 hours ago
0
A
New Bugs
Security
Measures
0
A
Vulnerabilities
0
Security Hotspots
0
A
New Vulnerabilities
0
New Security Hotspots
Maintainability
Measures
10min
A
Debt
1
Code Smells
0
A
New Debt
0
New Code Smells
Coverage
Measures
28.6%
Coverage
—
Coverage on New Code
About This Project
No tags
XS
25
Lines of Code
TypeScript
Project Activity
July 30, 2019
1.2.7
Quality Gate: Green (was Red)
July 30, 2019
1.2.6
Quality Gate: Red (was Green)
July 30, 2019
1.2.1
Show More
Quality Gate
(Default) Sonar way
Quality Profiles
(TypeScript) Sonar way

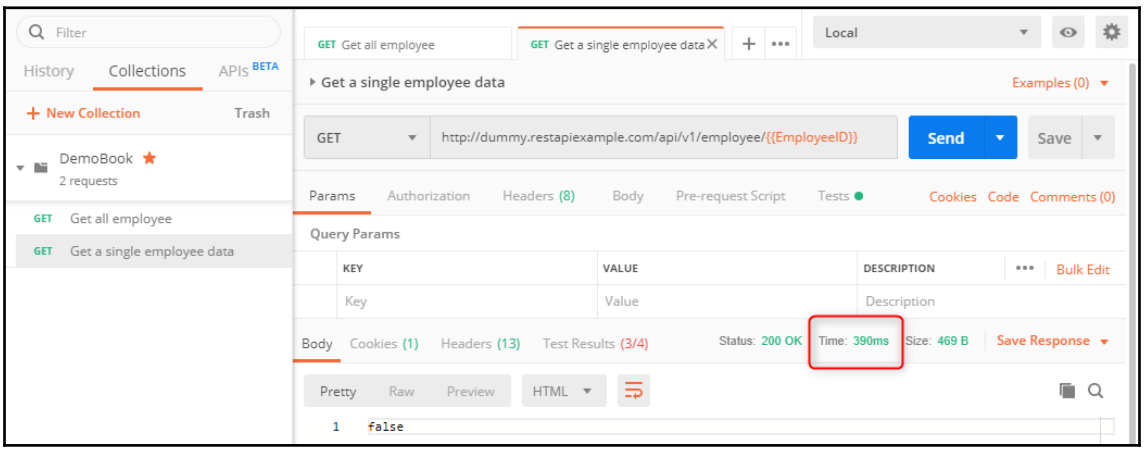
Chapter 11: Security and Performance Tests

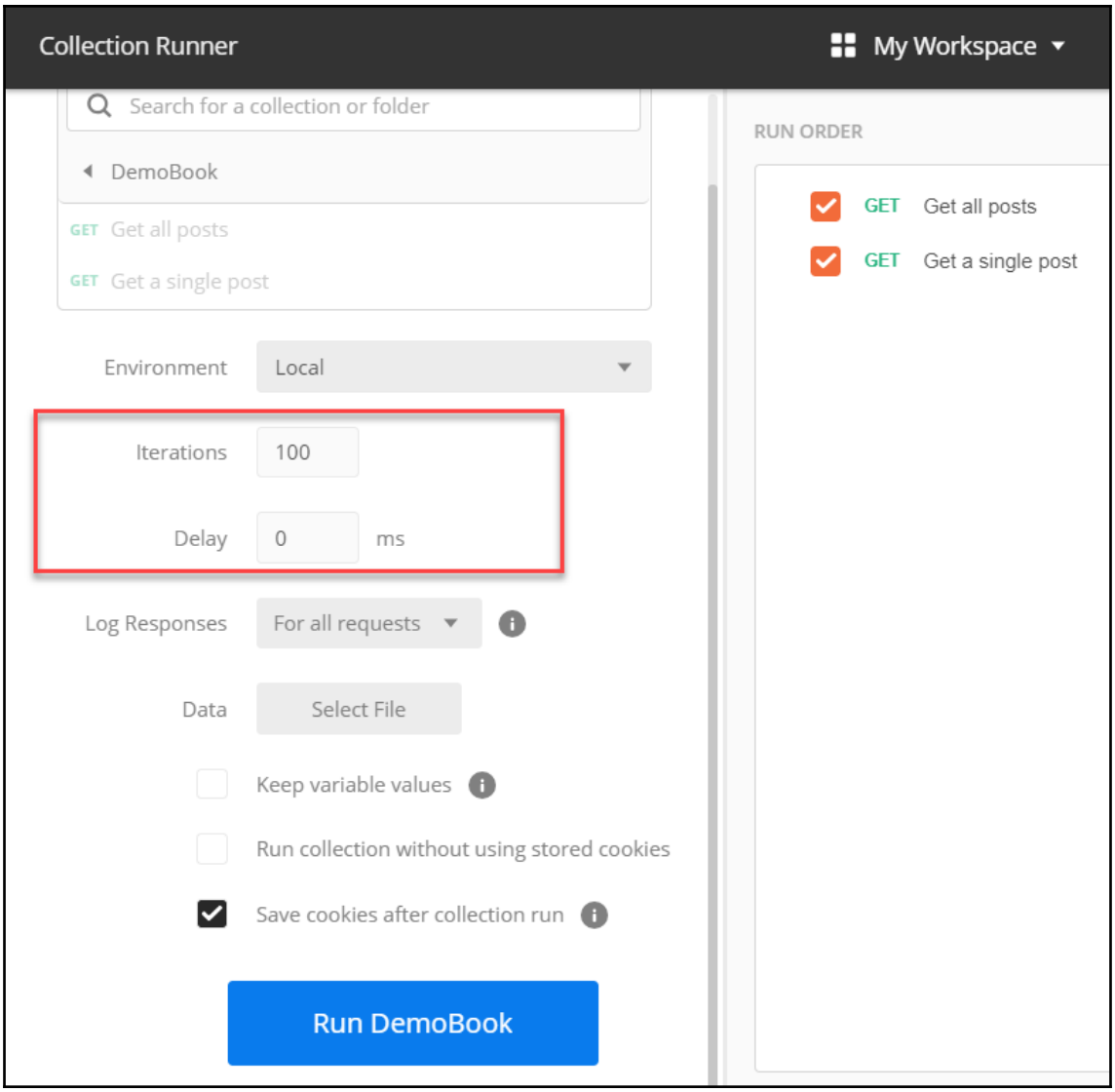


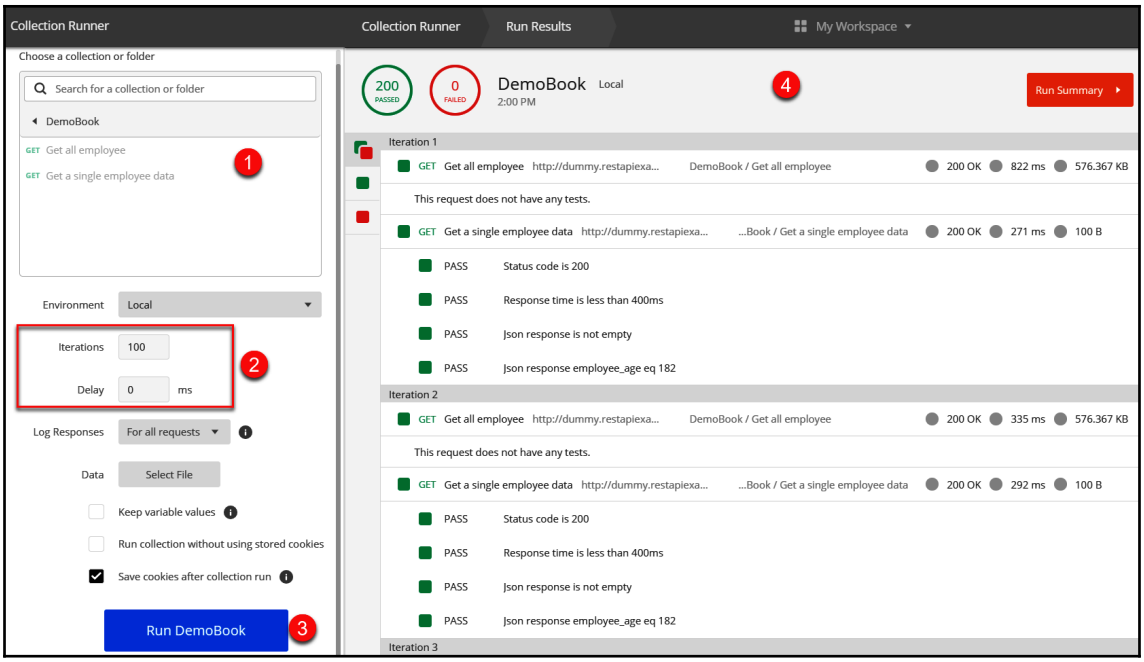



Untitled Session - 20190924-123004 - OWASP ZAP 2.8.0
File Edit View Analyse Report Tools Import Online Help
Standard Mode
Sites
Quick Start
Request
Response
Header: Text
Body: Text
Contexts
Sites
http://demo.guru99.com
1
HTTP/1.1 200 OK
Date: Tue, 24 Sep 2019 10:33:30 GMT
Server: Apache
Cache-Control: max-age=600
<link rel="stylesheet" type="text/css" href="../scripts/commonstyle.css">
<!-- Include the JavaScript files -->
<SCRIPT LANGUAGE="JavaScript" src="../scripts/validate_login.js"></SCRIPT>
<SCRIPT LANGUAGE="JavaScript" src="../scripts/basic_functions.js"></SCRIPT>
<script language="JavaScript" src="JavaScript/test.js"></script>
3
History
Search
Alerts
Output
Spider
Active Scan
Alerts (8)
Session ID in URL Rewrite
X-Frame-Options Header Not Set (72)
Absence of Anti-CSRF Tokens (47)
Cookie No HttpOnly Flag (2)
GET: http://demo.guru99.com/Agile_Project/Agi_V1/
GET: http://demo.guru99.com/insurance/v1/index.php
Cross-Domain JavaScript Source File Inclusion (167)
Information Disclosure - Debug Error Messages
Web Browser XSS Protection Not Enabled (193)
X-Content-Type-Options Header Missing (239)
2
Cookie No HttpOnly Flag
URL: http://demo.guru99.com/insurance/v1/index.php
Risk: Low
Confidence: Medium
Parameter: PHPSESSID
Attack:
Evidence: Set-Cookie: PHPSESSID
CWE ID: 16
WASC ID: 13
Source: Passive (10010 - Cookie No HttpOnly Flag)
Description:
A cookie has been set without the HttpOnly flag, which means that the cookie can be accessed by JavaScript. If a malicious script can be run on this page then the cookie will be accessible and can be transmitted to another site. If this is a session cookie then session hijacking may be possible.
4
Other Info:
Solution:
Ensure that the HttpOnly flag is set for all cookies.
Alerts 0 2 6 0
Current Scans 0 0 0 0 1 0 0 0 0 0


C:\Users\MikaelKRIEF>zap-cli --api-key "8rqgl7 " -p "8080" -v active-scan http://demo.guru99.com/Security/SEC_V1/
[1m[36m[INFO] [0mRunning an active scan...
[1m[35m[DEBUG] [0mScanning target http://demo.guru99.com/Security/SEC_V1/...
[1m[35m[DEBUG] [0mStarted scan with ID 5...
[1m[35m[DEBUG] [0mScan progress %: 13
[1m[35m[DEBUG] [0mScan #5 completed
1
C:\Users\MikaelKRIEF>zap-cli --api-key "8rqgl71j " -p "8080" report -o owasp-quick-scan-report.html --output-format html
[1m[36m[INFO] [0mReport saved to "owasp-quick-scan-report.html"
2


Filter
History
Collections
APIs BETA
New Collection
Trash
DemoBook
2 requests
GET Get all employee
GET Get a single employee data
GET Get all employee
GET Get a single employee data
Local
Get a single employee data
Examples (0)
GET
http://dummy.restapiexample.com/api/v1/employee/{{EmployeeID}}
Send
Save
Params
Authorization
Headers (8)
Body
Pre-request Script
Tests
Cookies
Code
Comments (0)
Query Params
KEY
VALUE
DESCRIPTION
Bulk Edit
Key
Value
Description
Body
Cookies (1)
Headers (13)
Test Results (3/4)
Status: 200 OK
Time: 390ms
Size: 469 B
Save Response
Pretty
Raw
Preview
HTML
1 false

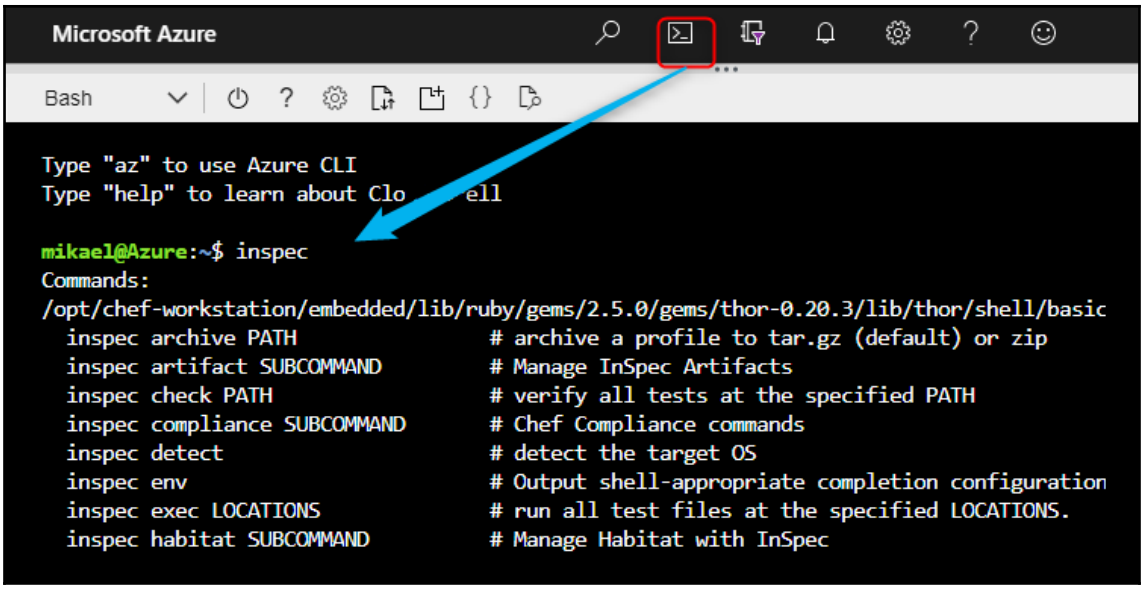

Collection Runner
My Workspace
Search for a collection or folder
DemoBook
GET Get all posts
GET Get a single post
Environment
Local
Iterations
100
Delay
0
ms
Log Responses
For all requests
Data
Select File
Keep variable values
Run collection without using stored cookies
Save cookies after collection run
Run DemoBook
RUN ORDER
GET Get all posts
GET Get a single post


Collection Runner
Collection Runner
Run Results
My Workspace
Choose a collection or folder
Search for a collection or folder
DemoBook
GET Get all employee
GET Get a single employee data
1
Environment
Local
Iterations
100
Delay
0
ms
2
Log Responses
For all requests
Data
Select File
Keep variable values
Run collection without using stored cookies
Save cookies after collection run
Run DemoBook
3
200
PASSED
0
FAILED
DemoBook
Local
2:00 PM
4
Run Summary
Iteration 1
GET Get all employee http://dummy.restapiexa... DemoBook / Get all employee 200 OK 822 ms 576.367 KB
This request does not have any tests.
GET Get a single employee data http://dummy.restapiexa... ...Book / Get a single employee data 200 OK 271 ms 100 B
PASS Status code is 200
PASS Response time is less than 400ms
PASS Json response is not empty
PASS Json response employee_age eq 182
Iteration 2
GET Get all employee http://dummy.restapiexa... DemoBook / Get all employee 200 OK 335 ms 576.367 KB
This request does not have any tests.
GET Get a single employee data http://dummy.restapiexa... ...Book / Get a single employee data 200 OK 292 ms 100 B
PASS Status code is 200
PASS Response time is less than 400ms
PASS Json response is not empty
PASS Json response employee_age eq 182
Iteration 3

Chapter 12: Security in the DevOps Process with DevSecOps

```
root@mkrief:/home/mikaelkrief# gem install inspec-bin
Fetching inspec-4.10.4.gem
Fetching inspec-bin-4.10.4.gem
Successfully installed inspec-4.10.4
Successfully installed inspec-bin-4.10.4
Parsing documentation for inspec-4.10.4
Installing ri documentation for inspec-4.10.4
Parsing documentation for inspec-bin-4.10.4
Installing ri documentation for inspec-bin-4.10.4
Done installing documentation for inspec, inspec-bin after 12 seconds
2 gems installed
```

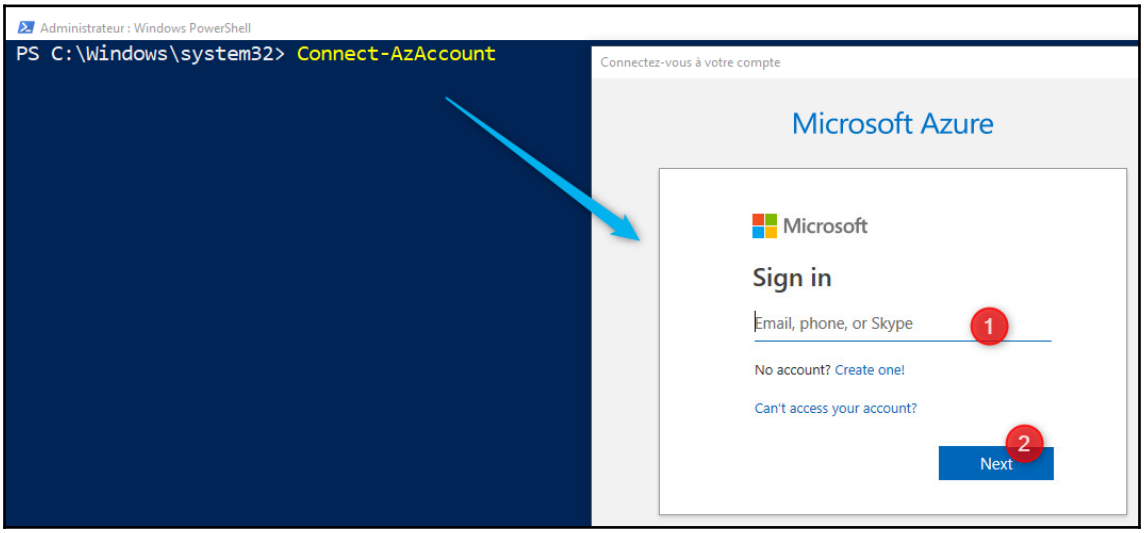
```
root@mkrief:/home/mikaelkrief# inspec --version
4.10.4
root@mkrief:/home/mikaelkrief# inspec
Commands:
  inspec archive PATH                # archive a profile to tar.gz (default) or zip
  inspec artifact SUBCOMMAND         # Manage Chef InSpec Artifacts
  inspec check PATH                  # verify all tests at the specified PATH
  inspec compliance SUBCOMMAND       # Chef Compliance commands
  inspec detect                      # detect the target OS
  inspec env                         # Output shell-appropriate completion configuration
  inspec exec LOCATIONS              # run all test files at the specified LOCATIONS.
  inspec habitat SUBCOMMAND          # Manage Habitat with Chef InSpec
  inspec help [COMMAND]              # Describe available commands or one specific command
  inspec init SUBCOMMAND             # Generate InSpec code
  inspec json PATH                   # read all tests in PATH and generate a JSON summary
  inspec nothing                     # does nothing
  inspec plugin SUBCOMMAND           # Manage Chef InSpec and Train plugins
  inspec shell                       # open an interactive debugging shell
  inspec supermarket SUBCOMMAND ...  # Supermarket commands
  inspec vendor PATH                 # Download all dependencies and generate a lockfile in a `vendor` directory
  inspec version                     # prints the version of this tool

Options:
  l, [--log-level=LOG_LEVEL]                      # Set the log level: info (default), debug, warn, error
      [--log-location=LOG_LOCATION]               # Location to send diagnostic log messages to. (default: $stdout or Inspec::Log.error)
      [--diagnose], [--no-diagnose]               # Show diagnostics (versions, configurations)
      [--color], [--no-color]                     # Use colors in output.
      [--interactive], [--no-interactive]         # Allow or disable user interaction
      [--disable-core-plugins]                    # Disable loading all plugins that are shipped in the lib/plugins directory of InSpec. Useful in development.
      [--disable-user-plugins]                    # Disable loading all plugins that the user installed.
      [--enable-telemetry], [--no-enable-telemetry]  # Allow or disable telemetry
      [--chef-license=CHEF_LICENSE]               # Accept the license for this product and any contained products: accept, accept-no-persist, accept-silent
```

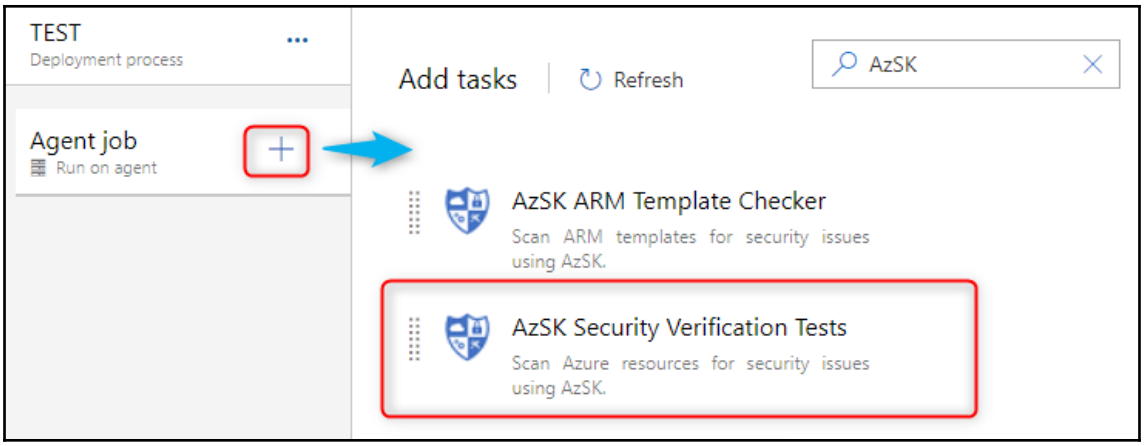


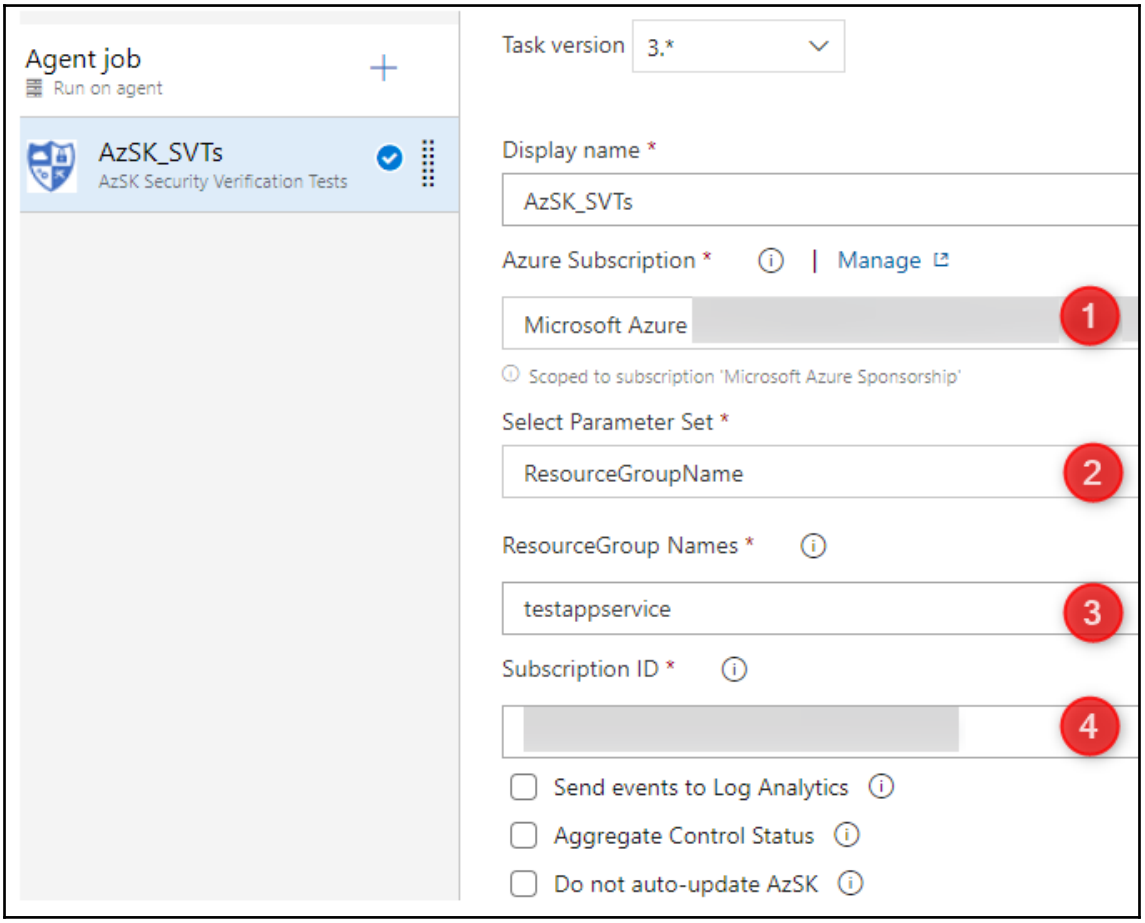

```
root@DESKTOP-9Q2U73J:/d/Repos/Learning_DevOps/CHAP12/azuretests# inspec check .
Location :   .
Profile :    azuretests
Controls :   3
Timestamp :  2019-08-08T17:34:36+02:00
Valid :      true

No errors or warnings
```

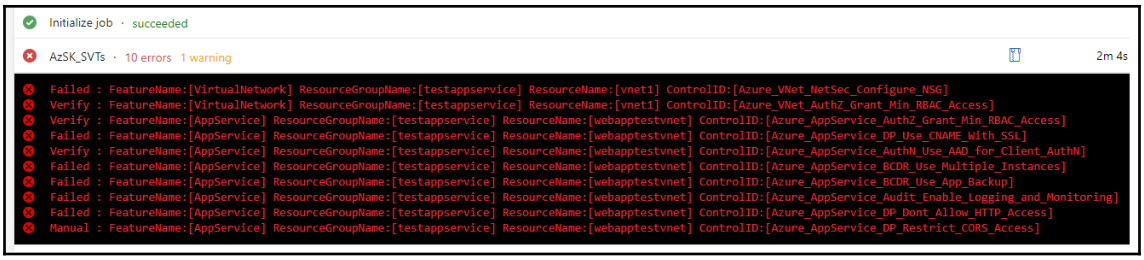
```
root@DESKTOP-9Q2U73J:/d/Repos/Learning_DevOps/CHAP12/azuretests# inspec exec . -t azure://

Profile: InSpec Profile (azuretests)
Version: 0.1.0
Target:  azure://8a7aace5-74aa-416f-b8e4-2c292b6304e5

  ✔  rg: InspecTest RG
     ✔  Resource Groups names should include "bookRg"
  ✔  subnet: InspecTest Subnet
     ✔  'book-subnet' subnet should exist
     ✔  'book-subnet' subnet address_prefix should eq "10.0.10.0/24"
  ✔  vm: InspecTest VM
     ✔  'bookvm' Virtual Machine should exist
     ✔  'bookvm' Virtual Machine location should eq "westeurope"
     ✔  'bookvm' Virtual Machine properties.hardwareProfile.vmSize should eq "Standard_DS1_v2"
     ✔  'bookvm' Virtual Machine properties.storageProfile.osDisk.osType should eq "Linux"


Profile: Azure Resource Pack (inspec-azure)
Version: 1.3.0
Target:  azure://8a7aace5-74aa-416f-b8e4-2c292b6304e5

     No tests executed.

Profile Summary: 3 successful controls, 0 control failures, 0 controls skipped
Test Summary: 7 successful, 0 failures, 0 skipped
```

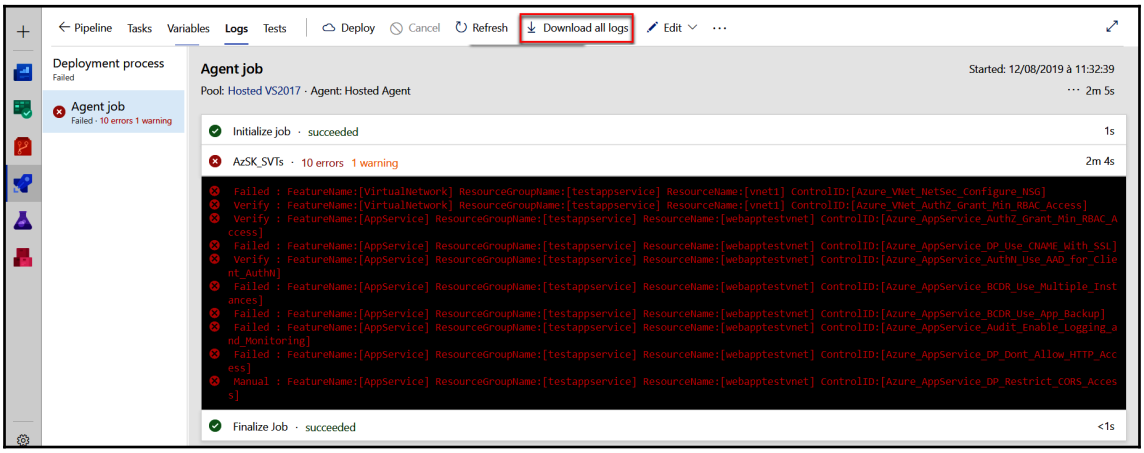
```
PS C:\Windows\system32> Get-Module -Name AzSK

ModuleType Version    Name          ExportedCommands
---------- -------    ----          ----------------
Script     3.15.0     AzSK          {Clear-AzSKSessionState, Get-AzSKAccessToken, Get-AzSKARMTemplateSecurit...
```

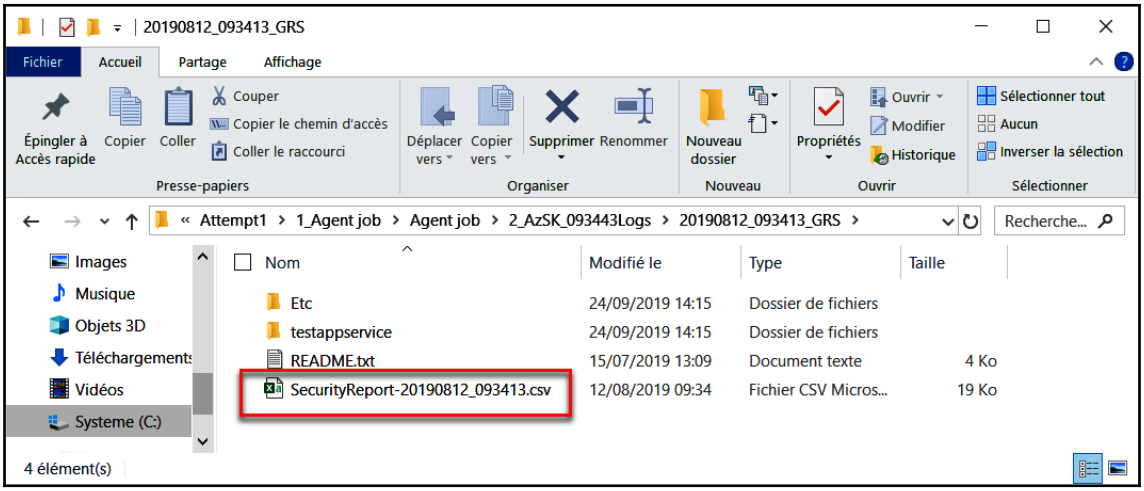



TEST
Deployment process
Agent job
Run on agent
Add tasks
Refresh
AzSK
AzSK ARM Template Checker
Scan ARM templates for security issues using AzSK.
AzSK Security Verification Tests
Scan Azure resources for security issues using AzSK.


Agent job
Run on agent
AzSK_SVTs
AzSK Security Verification Tests
Task version
3.*
Display name *
AzSK_SVTs
Azure Subscription *
Manage
Microsoft Azure
1
Scoped to subscription 'Microsoft Azure Sponsorship'
Select Parameter Set *
ResourceGroupName
2
ResourceGroup Names *
testappservice
3
Subscription ID *
4
Send events to Log Analytics
Aggregate Control Status
Do not auto-update AzSK


Initialize job · succeeded
AzSK_SVTs · 10 errors 1 warning
2m 4s
Failed : FeatureName:[VirtualNetwork] ResourceGroupName:[testappservice] ResourceName:[vnet1] ControlID:[Azure_VNet_NetSec_Configure_NSG]
Verify : FeatureName:[VirtualNetwork] ResourceGroupName:[testappservice] ResourceName:[vnet1] ControlID:[Azure_VNet_AuthZ_Grant_Min_RBAC_Access]
Verify : FeatureName:[AppService] ResourceGroupName:[testappservice] ResourceName:[webapptestvnet] ControlID:[Azure_AppService_AuthZ_Grant_Min_RBAC_Access]
Failed : FeatureName:[AppService] ResourceGroupName:[testappservice] ResourceName:[webapptestvnet] ControlID:[Azure_AppService_DP_Use_CNAME_With_SSL]
Verify : FeatureName:[AppService] ResourceGroupName:[testappservice] ResourceName:[webapptestvnet] ControlID:[Azure_AppService_AuthN_Use_AAD_for_Client_AuthN]
Failed : FeatureName:[AppService] ResourceGroupName:[testappservice] ResourceName:[webapptestvnet] ControlID:[Azure_AppService_BCDR_Use_Multiple_Instances]
Failed : FeatureName:[AppService] ResourceGroupName:[testappservice] ResourceName:[webapptestvnet] ControlID:[Azure_AppService_BCDR_Use_App_Backup]
Failed : FeatureName:[AppService] ResourceGroupName:[testappservice] ResourceName:[webapptestvnet] ControlID:[Azure_AppService_Audit_Enable_Logging_and_Monitoring]
Failed : FeatureName:[AppService] ResourceGroupName:[testappservice] ResourceName:[webapptestvnet] ControlID:[Azure_AppService_DP_Dont_Allow_HTTP_Access]
Manual : FeatureName:[AppService] ResourceGroupName:[testappservice] ResourceName:[webapptestvnet] ControlID:[Azure_AppService_DP_Restrict_CORS_Access]


Pipeline
Tasks
Variables
Logs
Tests
Deploy
Cancel
Refresh
Download all logs
Edit
Deployment process
Failed
Agent job
Failed · 10 errors 1 warning
Agent job
Pool: Hosted VS2017 · Agent: Hosted Agent
Started: 12/08/2019 à 11:32:39
2m 5s
Initialize job · succeeded
1s
AzSK_SVTs · 10 errors 1 warning
2m 4s
Finalize Job · succeeded
<1s


20190812_093413_GRS
Fichier
Accueil
Partage
Affichage
Épingler à Accès rapide
Copier
Coller
Couper
Copier le chemin d'accès
Coller le raccourci
Presse-papiers
Déplacer vers
Copier vers
Supprimer
Renommer
Organiser
Nouveau dossier
Nouveau
Propriétés
Ouvrir
Modifier
Historique
Ouvrir
Sélectionner tout
Aucun
Inverser la sélection
Sélectionner
« Attempt1 › 1_Agent job › Agent job › 2_AzSK_093443Logs › 20190812_093413_GRS ›
Recherche...
Images
Musique
Objets 3D
Téléchargements
Vidéos
Systeme (C:)
Nom
Modifié le
Type
Taille
Etc
24/09/2019 14:15
Dossier de fichiers
testappservice
24/09/2019 14:15
Dossier de fichiers
README.txt
15/07/2019 13:09
Document texte
4 Ko
SecurityReport-20190812_093413.csv
12/08/2019 09:34
Fichier CSV Micros...
19 Ko
4 élément(s)

```
root@mkrief:/home/mikaelkrief# vault server -dev
==> Vault server configuration:

             Api Address: http://127.0.0.1:8200
                     Cgo: disabled
         Cluster Address: https://127.0.0.1:8201
              Listener 1: tcp (addr: "127.0.0.1:8200", cluster address: "127.0.0.1:8201", max_request_duration: "1m30s", max_request_size: "33554432", tls: "disabled")
               Log Level: info
                   Mlock: supported: true, enabled: false
                 Storage: inmem
                 Version: Vault v1.2.1

WARNING! dev mode is enabled! In this mode, Vault runs entirely in-memory
and starts unsealed with a single unseal key. The root token is already
authenticated to the CLI, so you can immediately begin using Vault.

You may need to set the following environment variable:

    $ export VAULT_ADDR='http://127.0.0.1:8200'

The unseal key and root token are displayed below in case you want to
seal/unseal the Vault or re-authenticate.

Unseal Key: UvEy9upmBT+h
Root Token: s.rwgO0i2Jsr

Development mode should NOT be used in production installations!

==> Vault server started! Log data will stream in below:
```

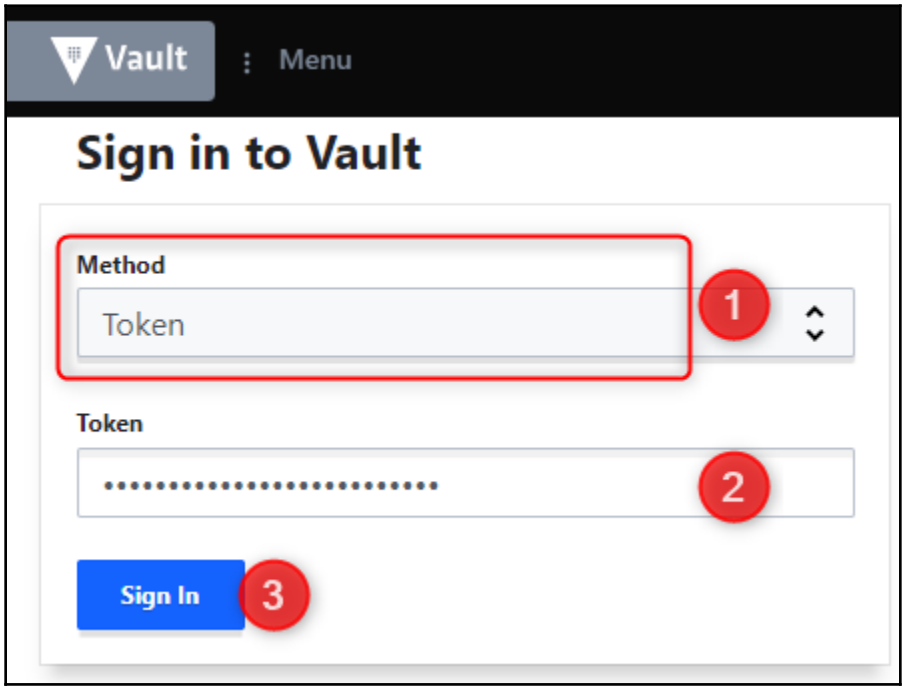
```
root@mkrief:/home/mikaelkrief# vault status
Key             Value
---             -----
Seal Type       shamir
Initialized     true
Sealed          false
Total Shares    1
Threshold       1
Version         1.2.1
Cluster Name    vault-cluster-9e7d6ef4
Cluster ID      82bfd424-73ce-9c3d-1dd1-dae6d88bb604
HA Enabled      false
```

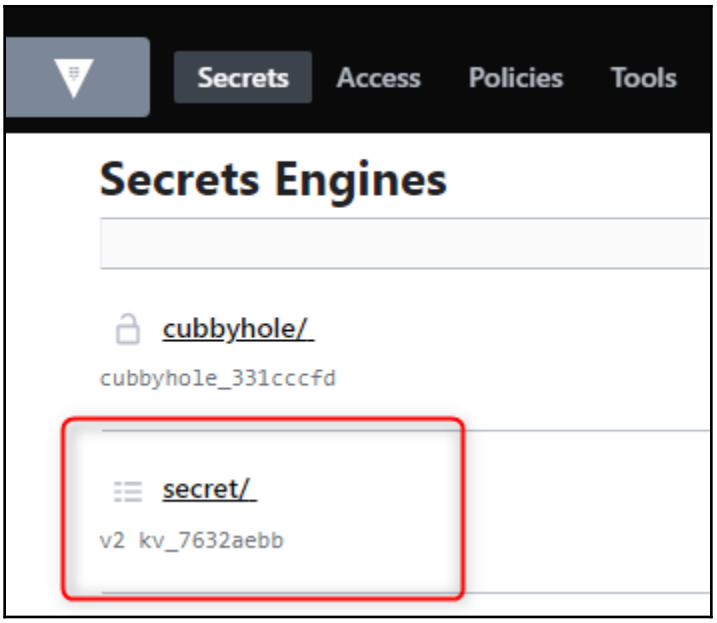
```
root@mkrief:/home/mikaelkrief# vault kv put secret/vmadmin vmpassword=admin123*
Key              Value
---              -----
created_time     2019-08-13T13:56:14.5200652Z
deletion_time    n/a
destroyed        false
version          1
```

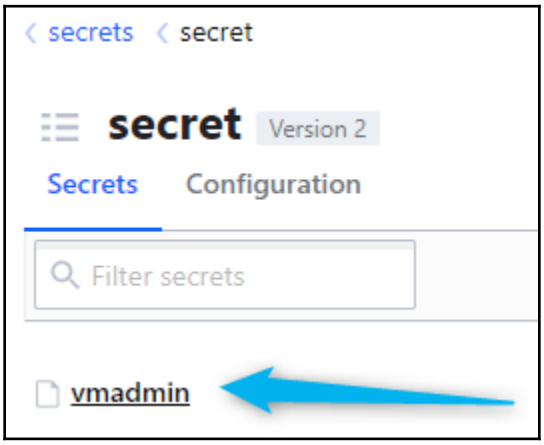
```
root@mkrief:/home/mikaelkrief# vault kv get secret/vmadmin
====== Metadata ======
Key              Value
---              -----
created_time     2019-08-13T14:09:20.4661459Z
deletion_time    n/a
destroyed        false
version          2

======= Data =======
Key           Value
---           -----
vmadmin       bookadmin
vmpassword    admin123*
```

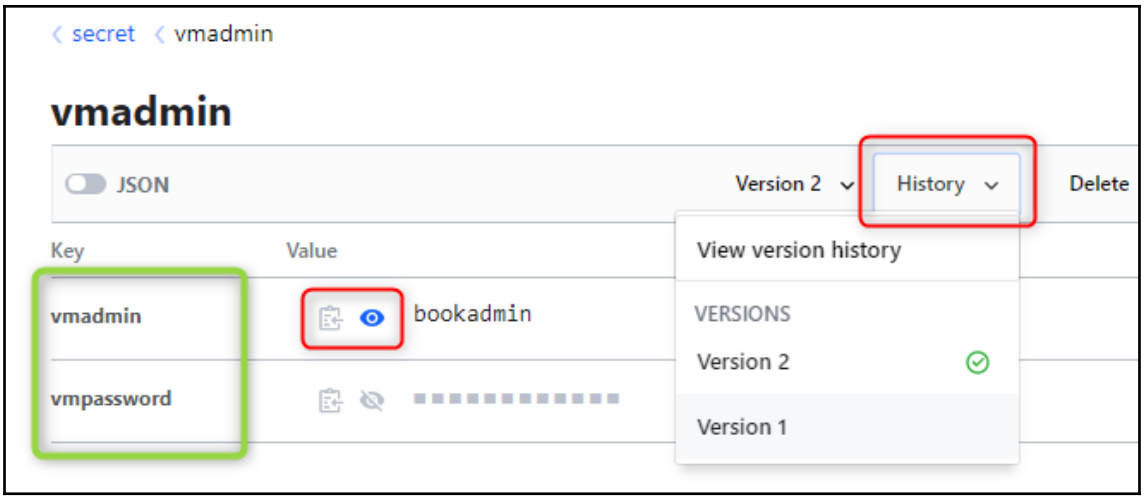
```
root@mkrief:/home/mikaelkrief# vault kv get -version=1 secret/vmadmin
====== Metadata ======
Key              Value
---              -----
created_time     2019-08-13T13:56:14.5200652Z
deletion_time    n/a
destroyed        false
version          1

======= Data =======
Key           Value
---           -----
vmpassword    admin123*
root@mkrief:/home/mikaelkrief#
```

```
root@mkrief:/home/mikaelkrief# vault server -dev
==> Vault server configuration:

             Api Address: http://127.0.0.1:8200
                     Cgo: disabled
         Cluster Address: https://127.0.0.1:8201
              Listener 1: tcp (addr: "127.0.0.1:8200", cluster address: "127.0.0.1:8
               Log Level: info
                   Mlock: supported: true, enabled: false

    $ export VAULT_ADDR='http://127.0.0.1:8200'

The unseal key and root token are displayed below in case you want to
seal/unseal the Vault or re-authenticate.

Unseal Key: fh7vj+J8lHHXr+AtTva4DU2Ru4kcPtqQuM9jKBoO1BA=
  Root Token: s.6MGUVmH1bnhD36aWf0Fb9oR4

Development mode should NOT be used in production installations!
```




Secrets
Access
Policies
Tools
Secrets Engines
cubbyhole/
cubbyhole_331cccfd
secret/
v2 kv_7632aebb


secrets
secret
secret
Version 2
Secrets
Configuration
Filter secrets
vmadmin



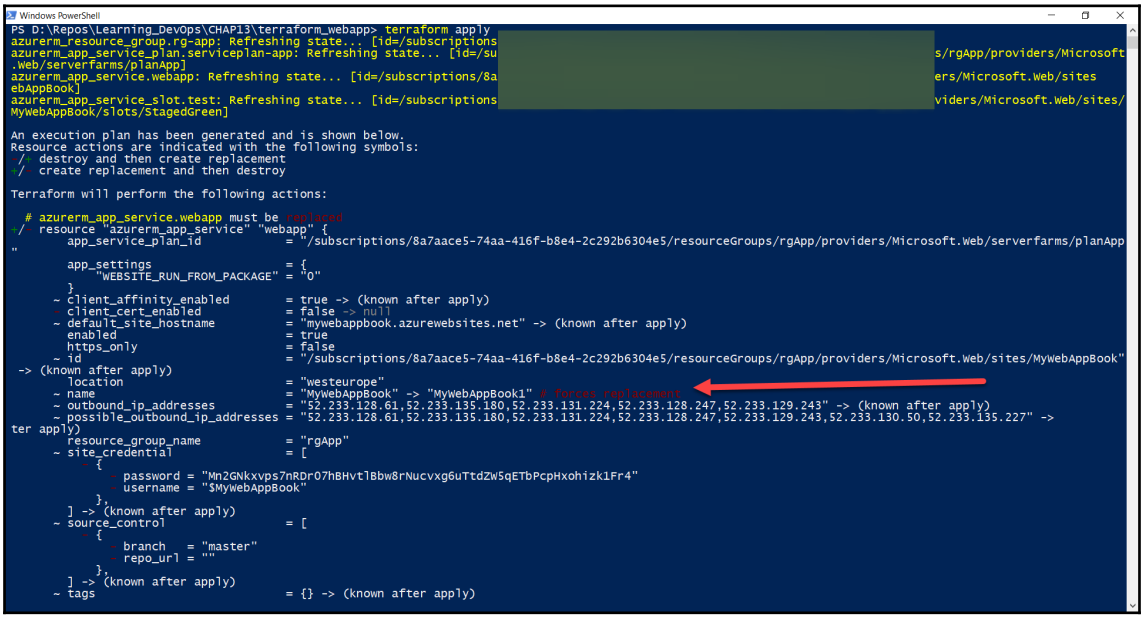

```
root@mkrief:/mnt/d/DevOps/Learning_DevOps/CHAP12/vault/terraform_usevault# terraform plan
Refreshing Terraform state in-memory prior to plan...
The refreshed state will be used to calculate this plan, but will not be
persisted to local or remote state storage.

data.vault_generic_secret.vmadmin_account: Refreshing state...

------------------------------------------------------------------------

No changes. Infrastructure is up-to-date.

This means that Terraform did not detect any differences between your
configuration and real physical resources that exist. As a result, no
actions need to be performed.
root@mkrief:/mnt/d/DevOps/Learning_DevOps/CHAP12/vault/terraform_usevault# terraform apply
data.vault_generic_secret.vmadmin_account: Refreshing state...

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

Outputs:

vmpassword = <sensitive>
```

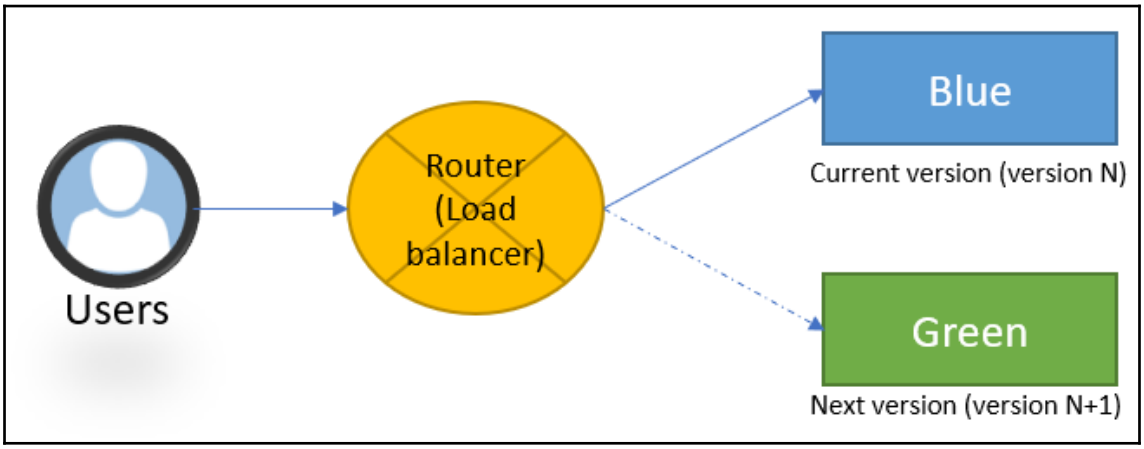
1

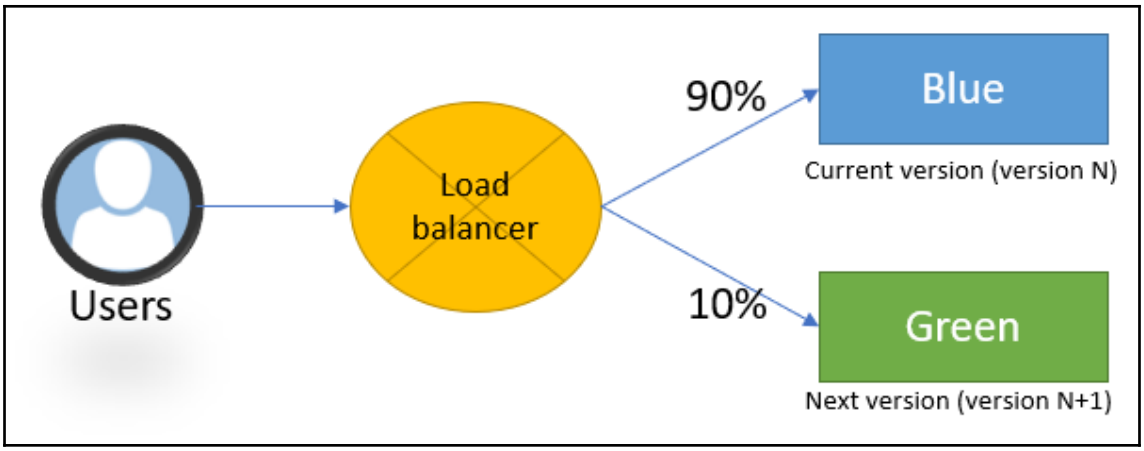
2

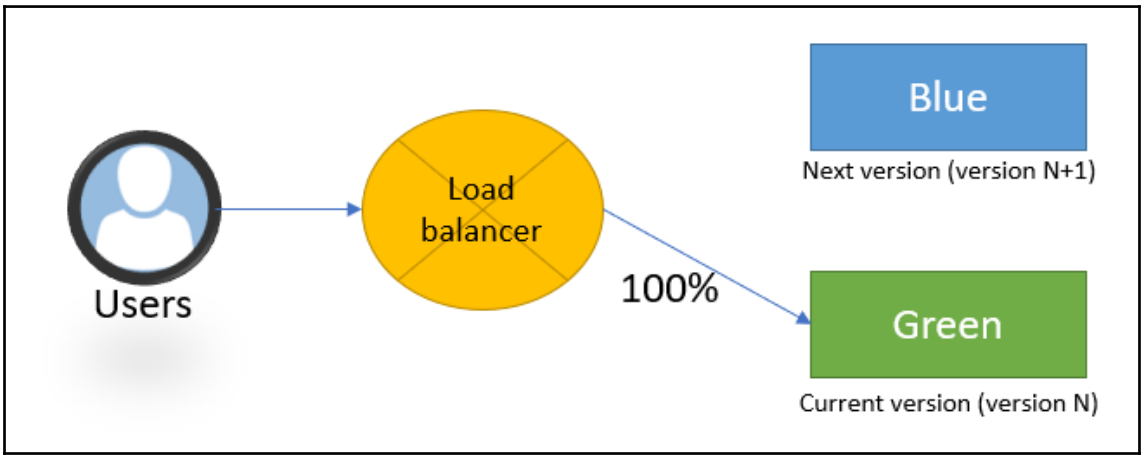
```
root@mkrief:/mnt/d/DevOps/Learning_DevOps/CHAP12/vault/terraform_usevault# terraform output -json
{
  "vmpassword": {
    "sensitive": true,
    "type": "string",
    "value": "admin123*"
  }
}
```

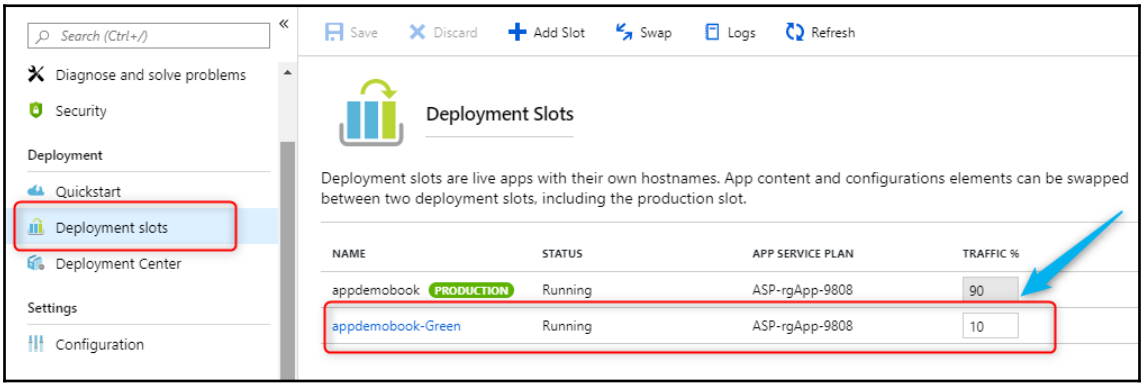
Chapter 13: Reducing Deployment Downtime

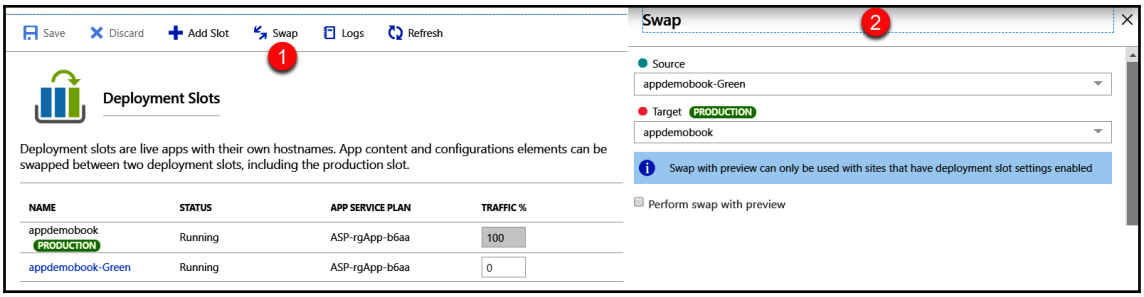


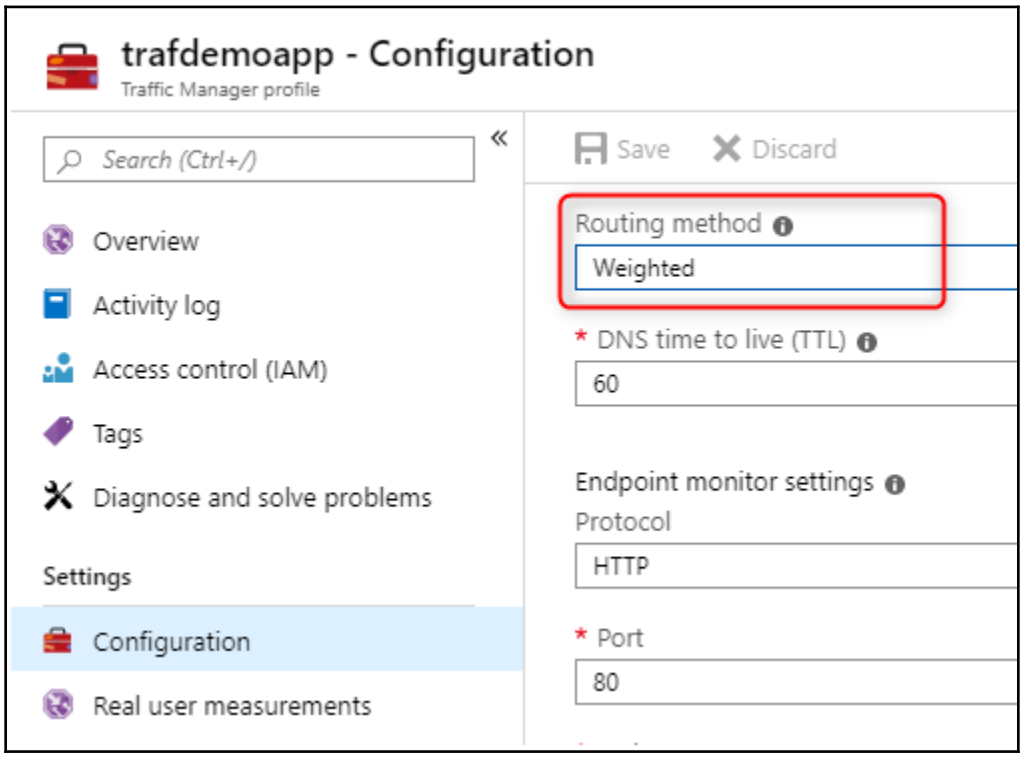


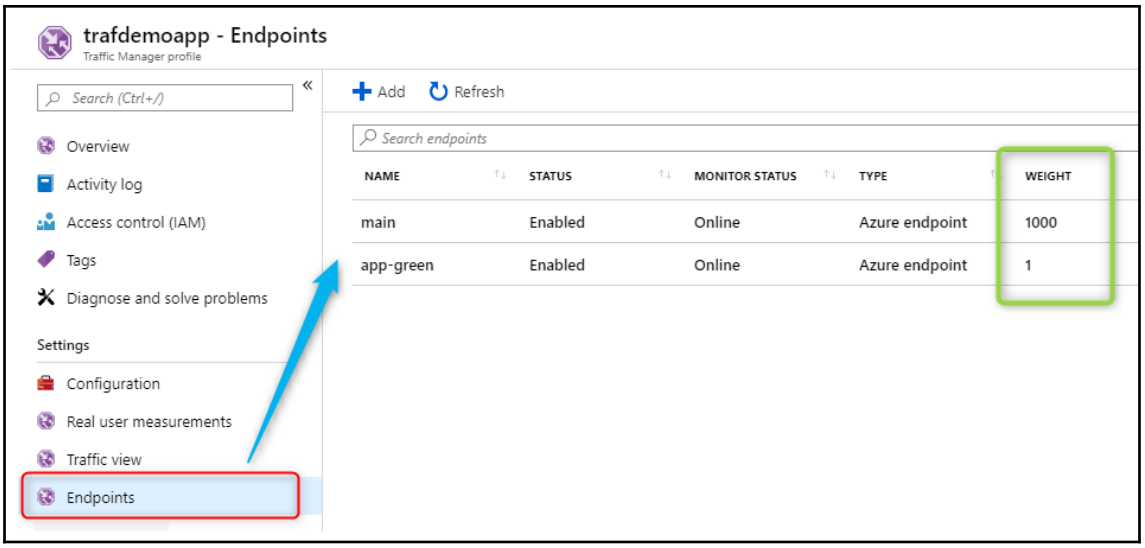

Users
Load balancer
90%
Blue
Current version (version N)
10%
Green
Next version (version N+1)

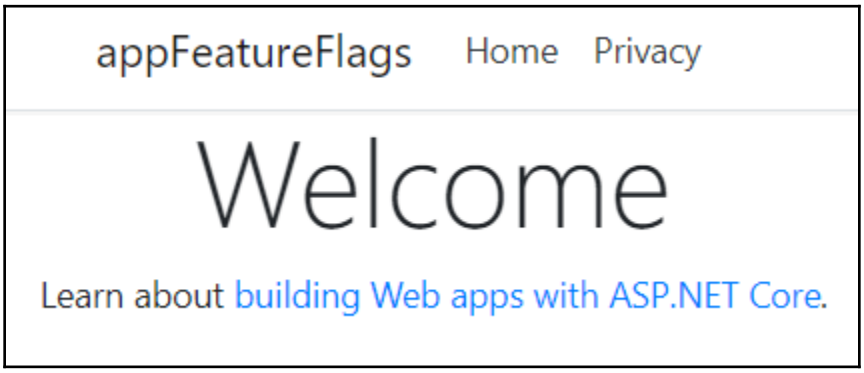

Users
Load balancer
Blue
Next version (version N+1)
100%
Green
Current version (version N)

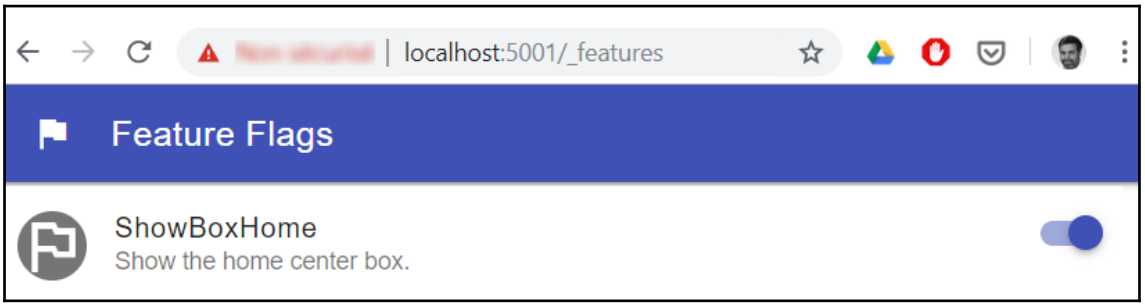

Search (Ctrl+/)
Diagnose and solve problems
Security
Deployment
Quickstart
Deployment slots
Deployment Center
Settings
Configuration
Save
Discard
Add Slot
Swap
Logs
Refresh
Deployment Slots
Deployment slots are live apps with their own hostnames. App content and configurations elements can be swapped between two deployment slots, including the production slot.
NAME
STATUS
APP SERVICE PLAN
TRAFFIC %
appdemobook PRODUCTION
Running
ASP-rgApp-9808
90
appdemobook-Green
Running
ASP-rgApp-9808
10

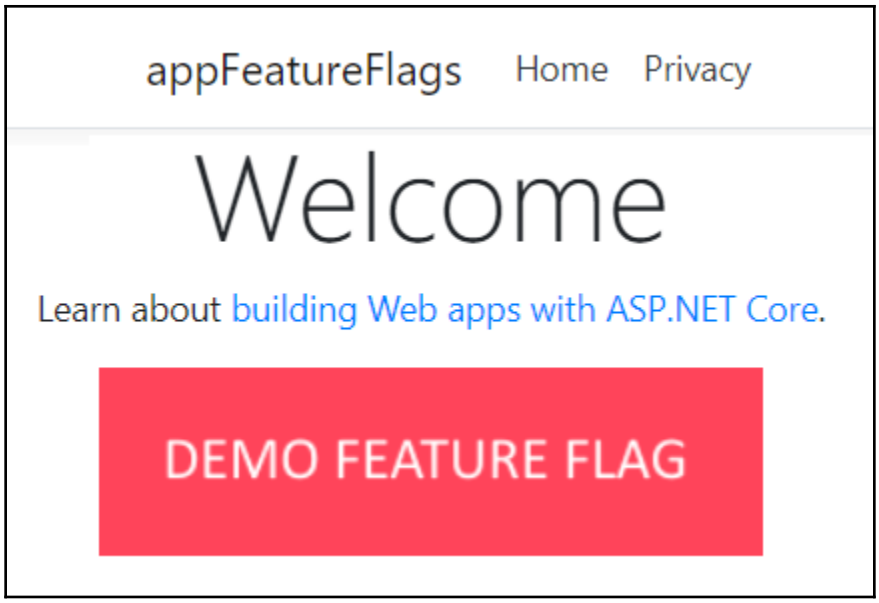

Save
Discard
Add Slot
Swap
Logs
Refresh
1
Deployment Slots
Deployment slots are live apps with their own hostnames. App content and configurations elements can be swapped between two deployment slots, including the production slot.
NAME
STATUS
APP SERVICE PLAN
TRAFFIC %
appdemobook
PRODUCTION
Running
ASP-rgApp-b6aa
100
appdemobook-Green
Running
ASP-rgApp-b6aa
0
Swap
2
Source
appdemobook-Green
Target
PRODUCTION
appdemobook
Swap with preview can only be used with sites that have deployment slot settings enabled
Perform swap with preview

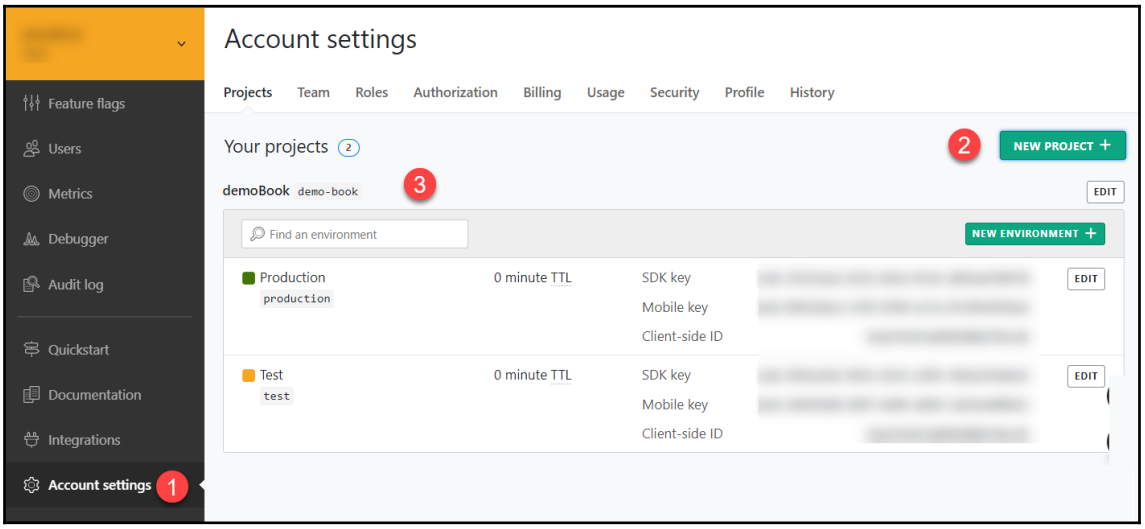

trafdemoapp - Configuration
Traffic Manager profile
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Configuration
Real user measurements
Save
Discard
Routing method
Weighted
* DNS time to live (TTL)
60
Endpoint monitor settings
Protocol
HTTP
* Port
80

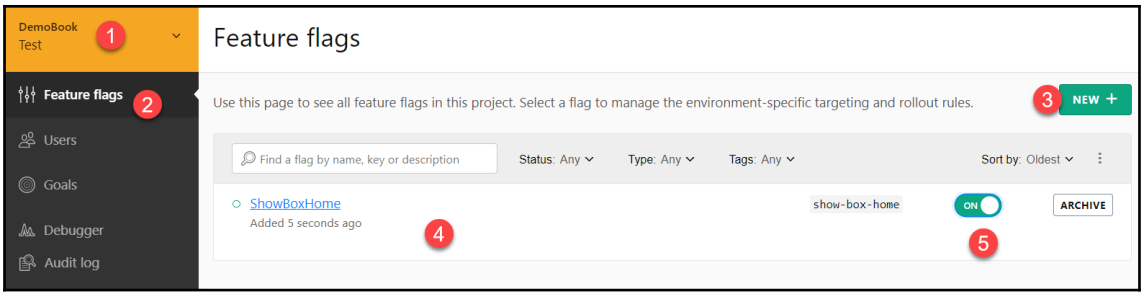

trafdemoapp - Endpoints
Traffic Manager profile
Search (Ctrl+/)
Add
Refresh
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Configuration
Real user measurements
Traffic view
Endpoints
Search endpoints
NAME
STATUS
MONITOR STATUS
TYPE
WEIGHT
main
Enabled
Online
Azure endpoint
1000
app-green
Enabled
Online
Azure endpoint
1

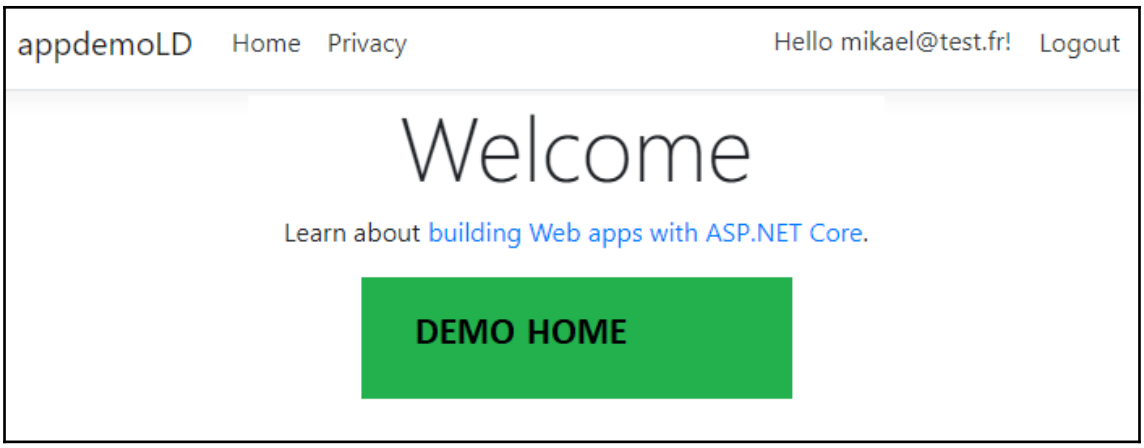

appFeatureFlags
Home
Privacy
Welcome
Learn about building Web apps with ASP.NET Core.

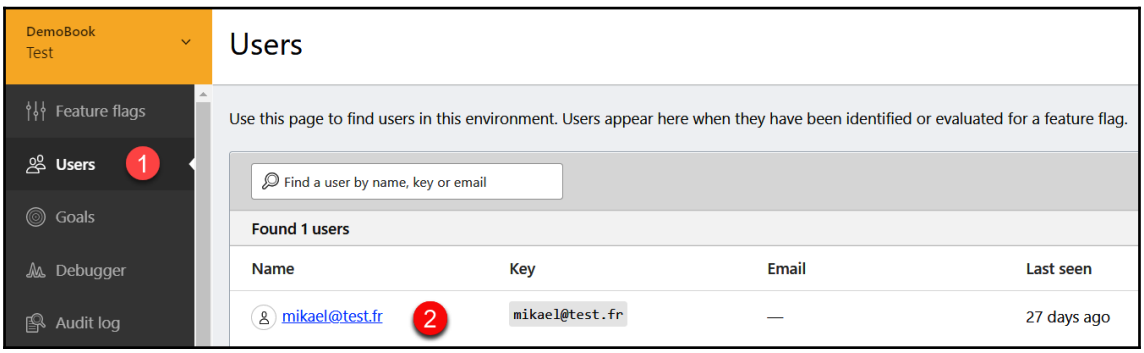

localhost:5001/_features
Feature Flags
ShowBoxHome
Show the home center box.


appFeatureFlags
Home
Privacy
Welcome
Learn about building Web apps with ASP.NET Core.
DEMO FEATURE FLAG

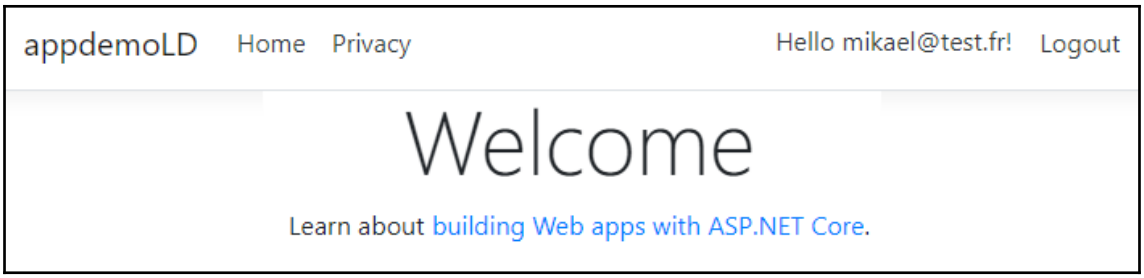

Account settings
Projects
Team
Roles
Authorization
Billing
Usage
Security
Profile
History
Feature flags
Users
Metrics
Debugger
Audit log
Quickstart
Documentation
Integrations
Account settings
1
Your projects
2
NEW PROJECT +
demoBook
demo-book
3
EDIT
Find an environment
NEW ENVIRONMENT +
Production
production
0 minute TTL
SDK key
Mobile key
Client-side ID
EDIT
Test
test
0 minute TTL
SDK key
Mobile key
Client-side ID
EDIT


DemoBook
Test
1
Feature flags
2
Users
Goals
Debugger
Audit log
Feature flags
Use this page to see all feature flags in this project. Select a flag to manage the environment-specific targeting and rollout rules.
3
NEW +
Find a flag by name, key or description
Status: Any
Type: Any
Tags: Any
Sort by: Oldest
ShowBoxHome
Added 5 seconds ago
4
show-box-home
ON
5
ARCHIVE

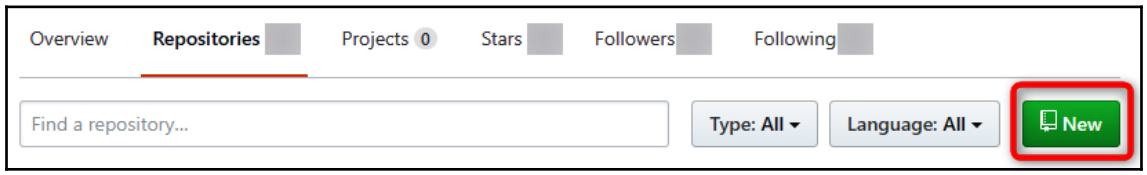

appdemoLD
Home
Privacy
Hello mikael@test.fr!
Logout
Welcome
Learn about building Web apps with ASP.NET Core.
DEMO HOME

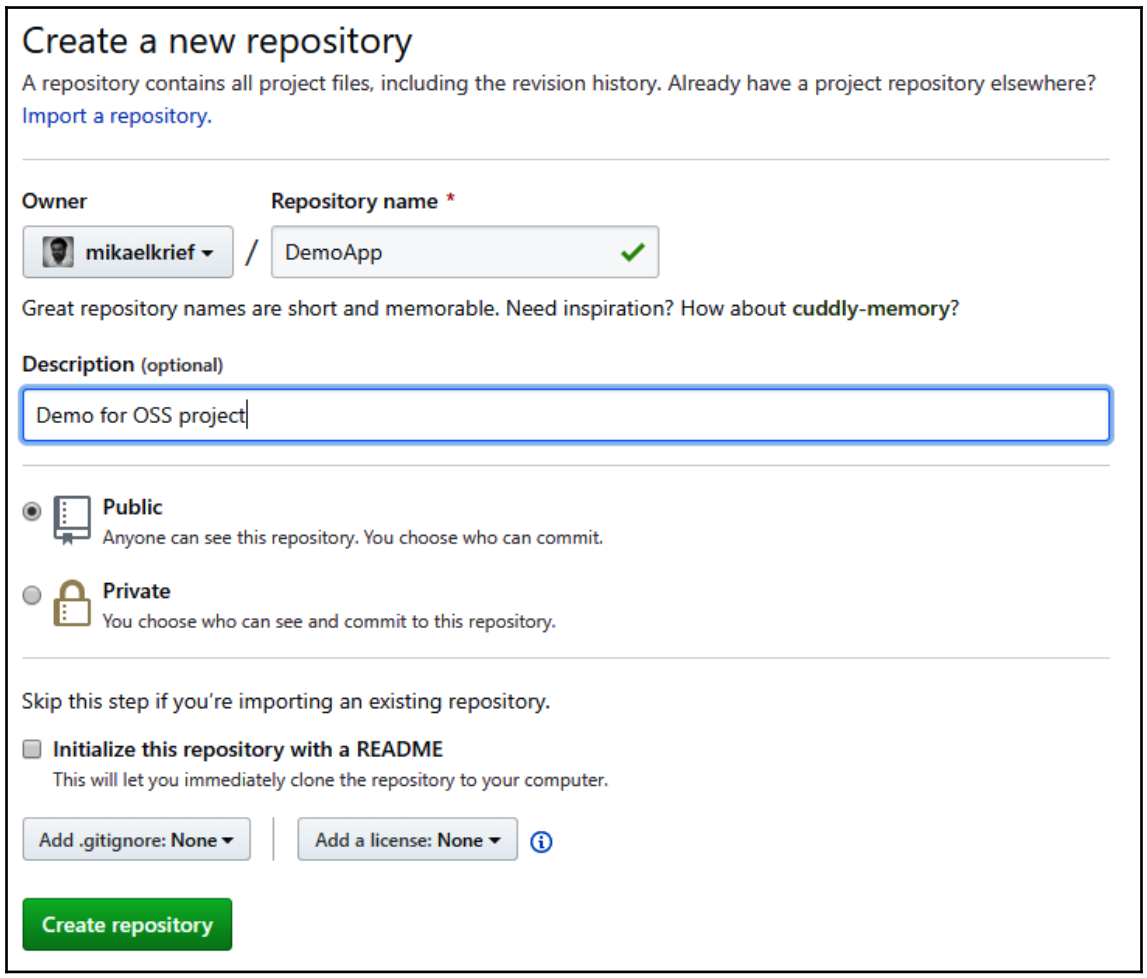

DemoBook
Test
Feature flags
Users
1
Goals
Debugger
Audit log
Users
Use this page to find users in this environment. Users appear here when they have been identified or evaluated for a feature flag.
Find a user by name, key or email
Found 1 users
Name
Key
Email
Last seen
mikael@test.fr
2
mikael@test.fr
—
27 days ago

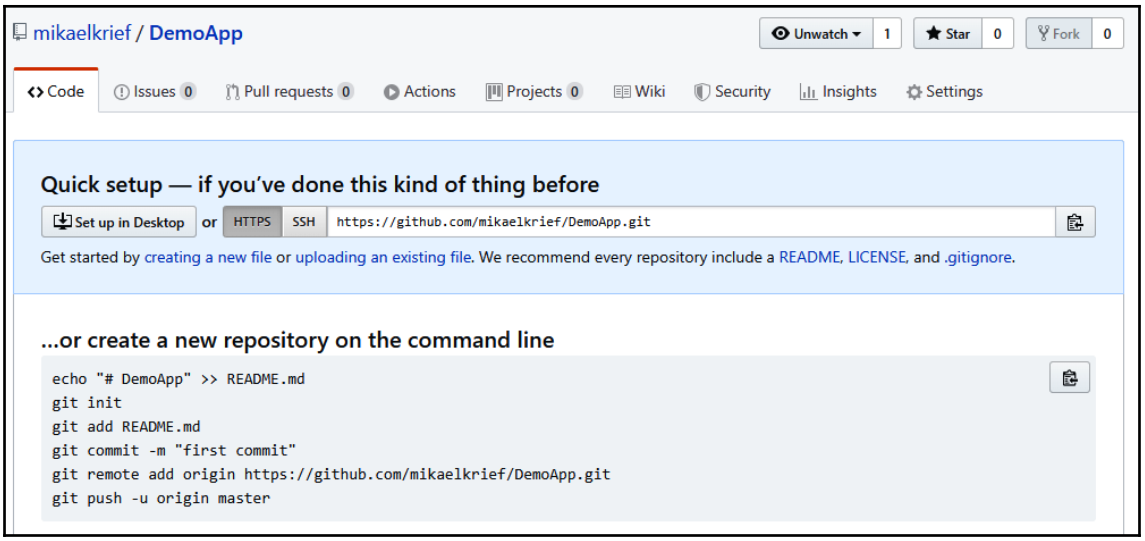
Users / mikael@test.fr
mikael@test.fr
mikael@test.fr
DELETE
Attributes
key
mikael@test.fr
Flag settings
Find a feature flag
SAVE CHANGES
ShowBoxHome
false


appdemoLD
Home
Privacy
Hello mikael@test.fr!
Logout
Welcome
Learn about building Web apps with ASP.NET Core.

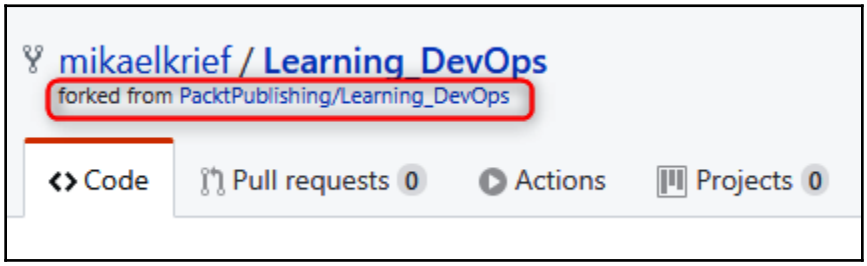
Chapter 14: DevOps for Open Source Projects

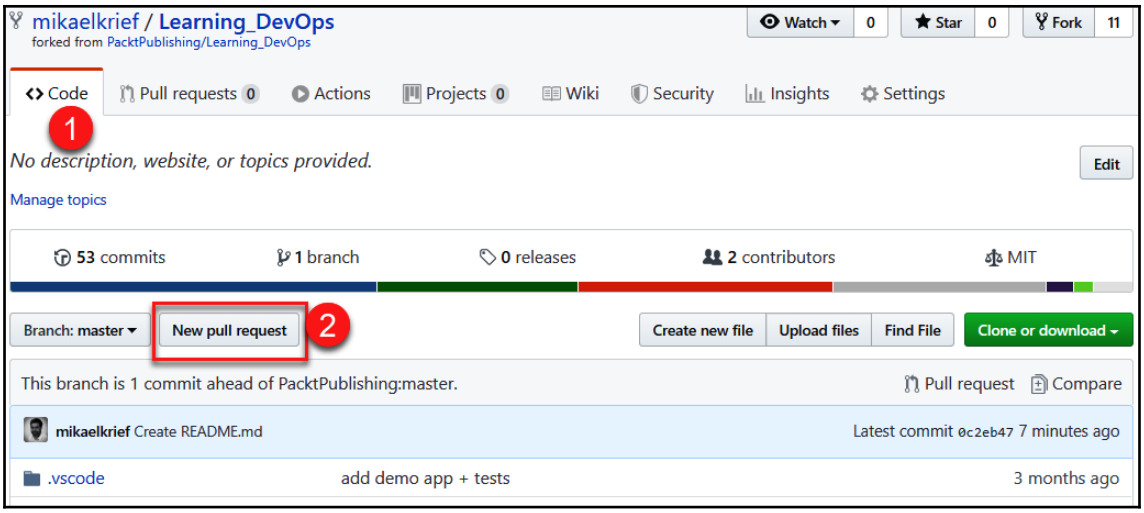


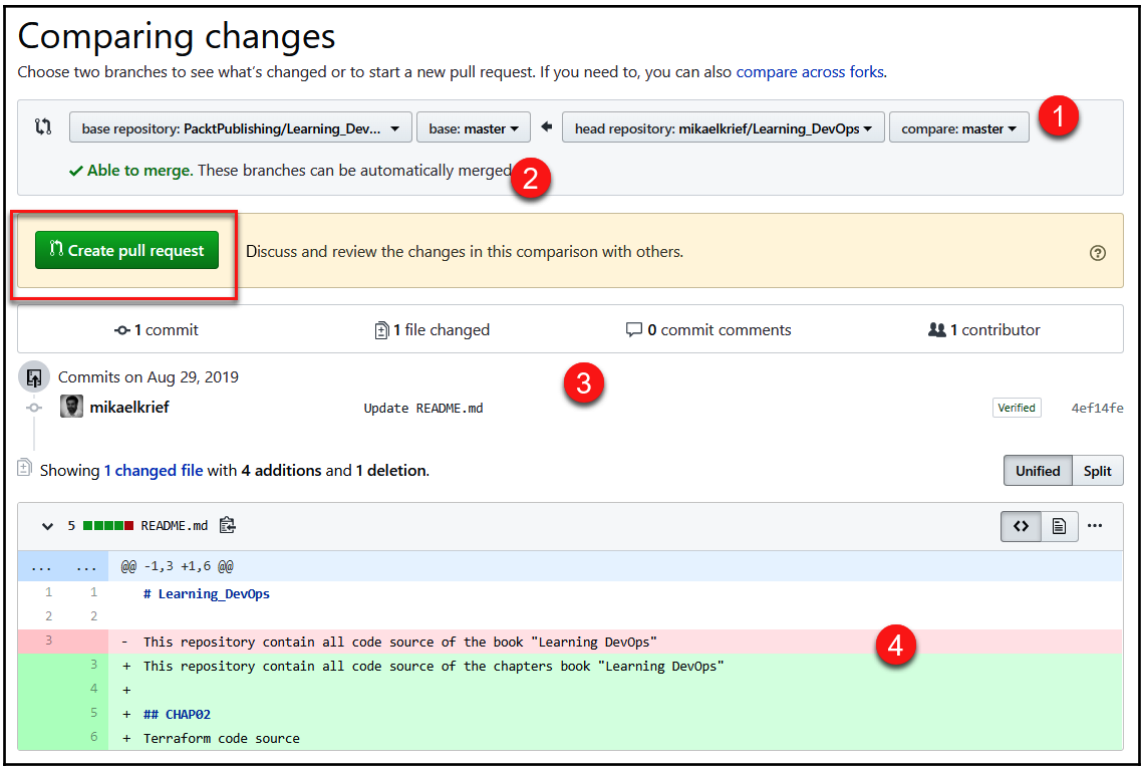


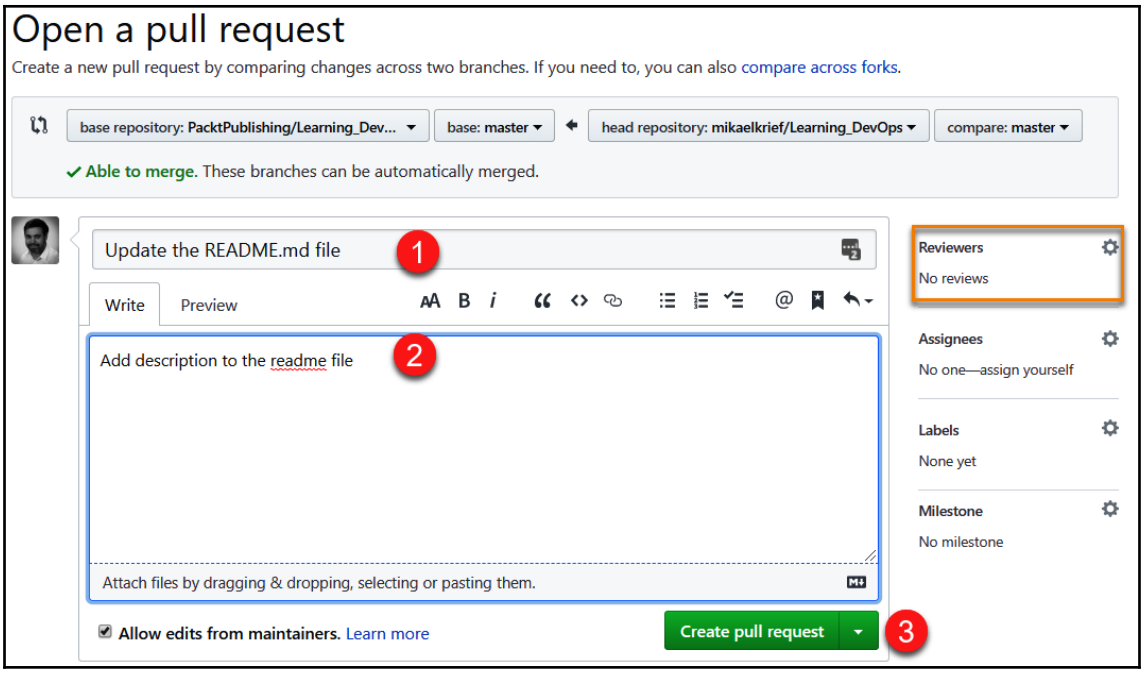

mikaelkrief / DemoApp
Unwatch 1
Star 0
Fork 0
Code
Issues 0
Pull requests 0
Actions
Projects 0
Wiki
Security
Insights
Settings
Quick setup — if you've done this kind of thing before
Set up in Desktop
or
HTTPS
SSH
https://github.com/mikaelkrief/DemoApp.git
Get started by creating a new file or uploading an existing file. We recommend every repository include a README, LICENSE, and .gitignore.
...or create a new repository on the command line
echo "# DemoApp" >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin https://github.com/mikaelkrief/DemoApp.git
git push -u origin master

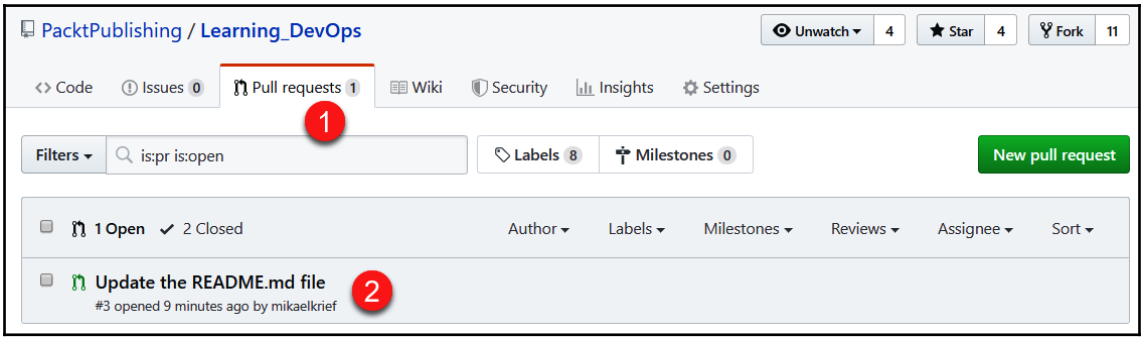
PacktPublishing / Learning_DevOps
Unwatch 4
Star 4
Fork 11
Code
Issues 0
Pull requests 0
Wiki
Security
Insights
Settings
No description, website, or topics provided.
Edit

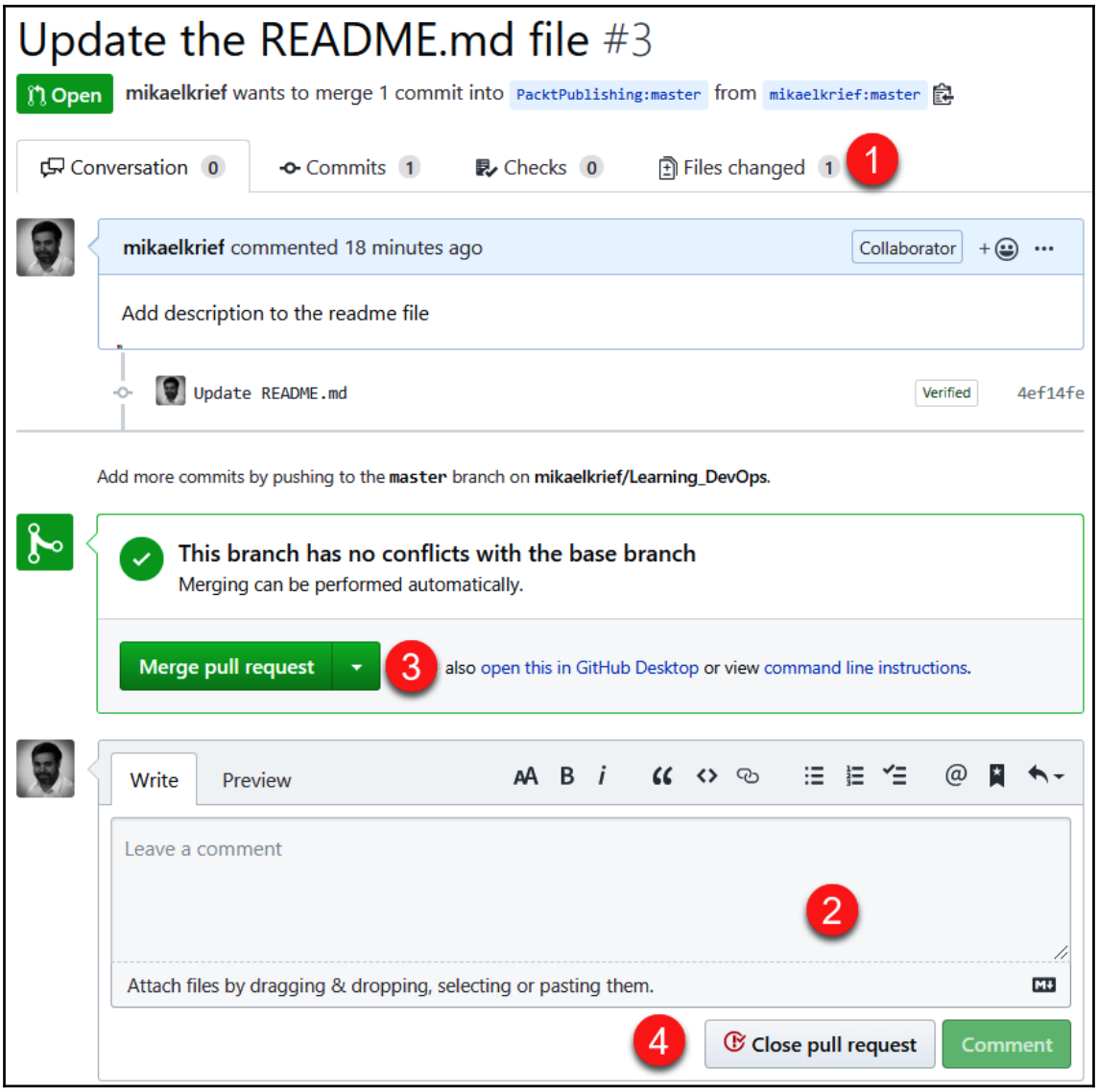

mikaelkrief / Learning_DevOps
forked from PacktPublishing/Learning_DevOps
Code
Pull requests 0
Actions
Projects 0


mikaelkrief / Learning_DevOps
forked from PacktPublishing/Learning_DevOps
Watch 0
Star 0
Fork 11
Code
Pull requests 0
Actions
Projects 0
Wiki
Security
Insights
Settings
1
No description, website, or topics provided.
Edit
Manage topics
53 commits
1 branch
0 releases
2 contributors
MIT
Branch: master
New pull request
2
Create new file
Upload files
Find File
Clone or download
This branch is 1 commit ahead of PacktPublishing:master.
Pull request
Compare
mikaelkrief Create README.md
Latest commit 0c2eb47 7 minutes ago
.vscode
add demo app + tests
3 months ago


Comparing changes
Choose two branches to see what's changed or to start a new pull request. If you need to, you can also compare across forks.
base repository: PacktPublishing/Learning_Dev...
base: master
head repository: mikaelkrief/Learning_DevOps
compare: master
1
Able to merge. These branches can be automatically merged.
2
Create pull request
Discuss and review the changes in this comparison with others.
1 commit
1 file changed
0 commit comments
1 contributor
Commits on Aug 29, 2019
mikaelkrief
Update README.md
3
Verified
4ef14fe
Showing 1 changed file with 4 additions and 1 deletion.
Unified
Split
5 README.md
@@ -1,3 +1,6 @@
# Learning_DevOps
- This repository contain all code source of the book "Learning DevOps"
4
+ This repository contain all code source of the chapters book "Learning DevOps"
+
+ ## CHAP02
+ Terraform code source


Open a pull request
Create a new pull request by comparing changes across two branches. If you need to, you can also compare across forks.
base repository: PacktPublishing/Learning_Dev...
base: master
head repository: mikaelkrief/Learning_DevOps
compare: master
Able to merge. These branches can be automatically merged.
Update the README.md file
1
Write
Preview
Add description to the readme file
2
Attach files by dragging & dropping, selecting or pasting them.
Allow edits from maintainers. Learn more
Create pull request
3
Reviewers
No reviews
Assignees
No one—assign yourself
Labels
None yet
Milestone
No milestone


PacktPublishing / Learning_DevOps
Unwatch 4
Star 4
Fork 11
Code
Issues 0
Pull requests 1
Wiki
Security
Insights
Settings
1
Filters
is:pr is:open
Labels 8
Milestones 0
New pull request
1 Open
2 Closed
Author
Labels
Milestones
Reviews
Assignee
Sort
Update the README.md file
#3 opened 9 minutes ago by mikaelkrief
2


Update the README.md file #3
Open
mikaelkrief wants to merge 1 commit into PacktPublishing:master from mikaelkrief:master
Conversation 0
Commits 1
Checks 0
Files changed 1
1
mikaelkrief commented 18 minutes ago
Collaborator
Add description to the readme file
Update README.md
Verified
4ef14fe
Add more commits by pushing to the master branch on mikaelkrief/Learning_DevOps.
This branch has no conflicts with the base branch
Merging can be performed automatically.
Merge pull request
3
also open this in GitHub Desktop or view command line instructions.
Write
Preview
Leave a comment
2
Attach files by dragging & dropping, selecting or pasting them.
4
Close pull request
Comment

1.30.1 (June 07, 2019)

BUG FIXES:

- Ensuring the authorization header is set for calls to the User Assigned Identity API's (#3613)

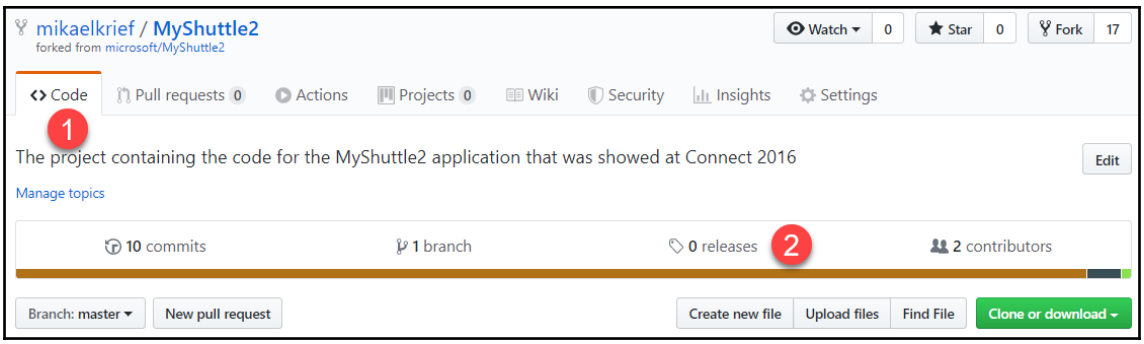
1.30.0 (June 07, 2019)

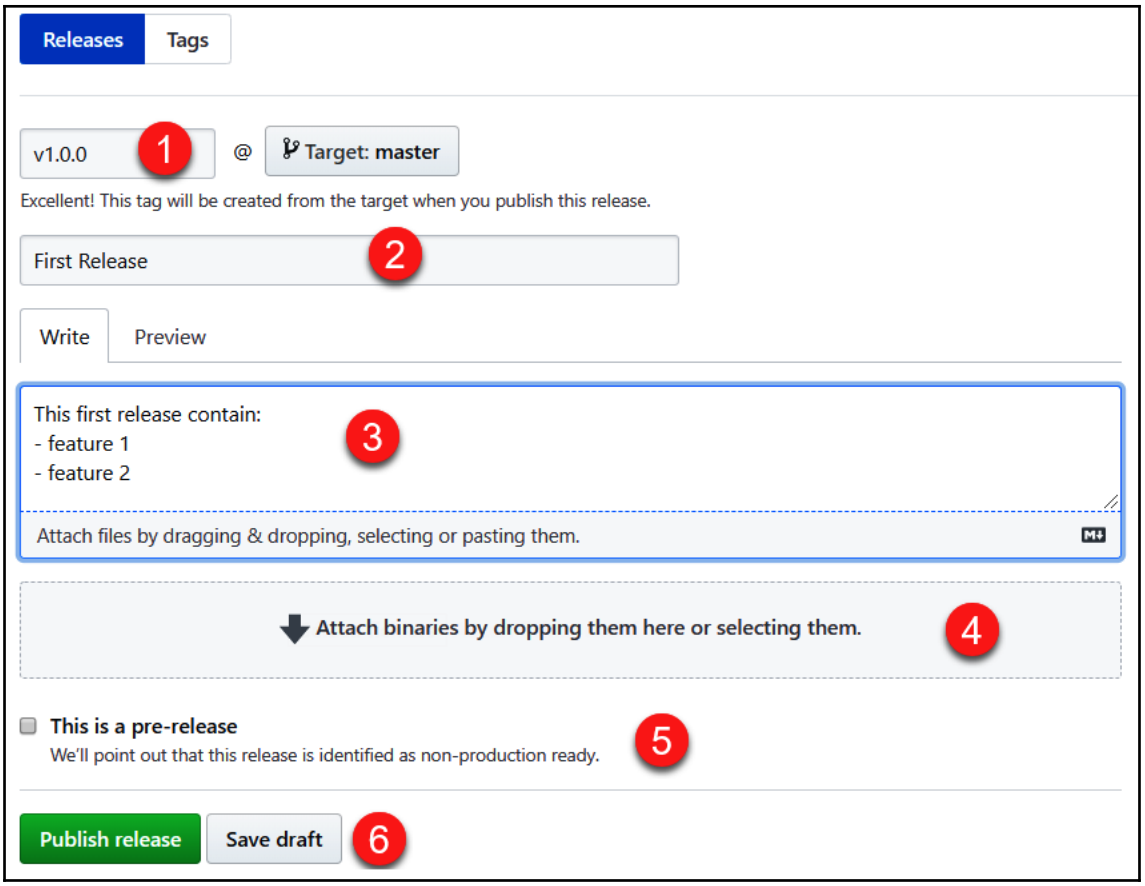
FEATURES:

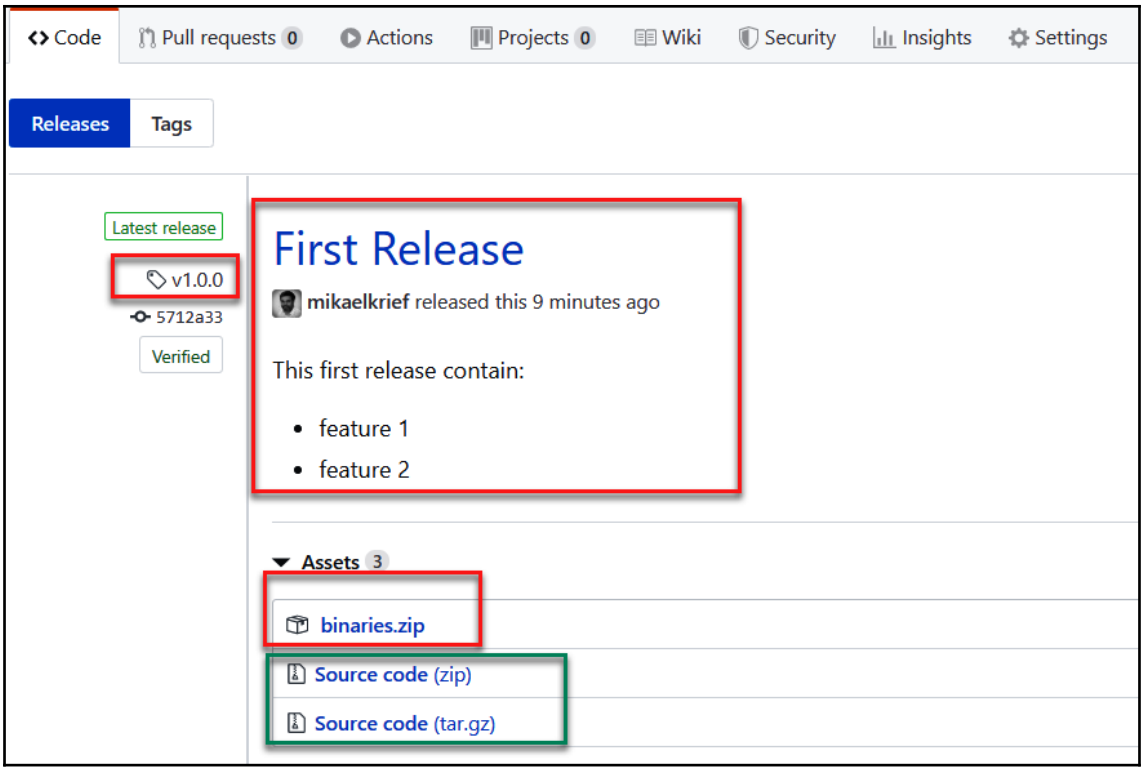
- **New Data Source:** `azurerm_redis_cache` (#3481)
- **New Data Source:** `azurerm_sql_server` (#3513)
- **New Data Source:** `azurerm_virtual_network_gateway_connection` (#3571)

IMPROVEMENTS:

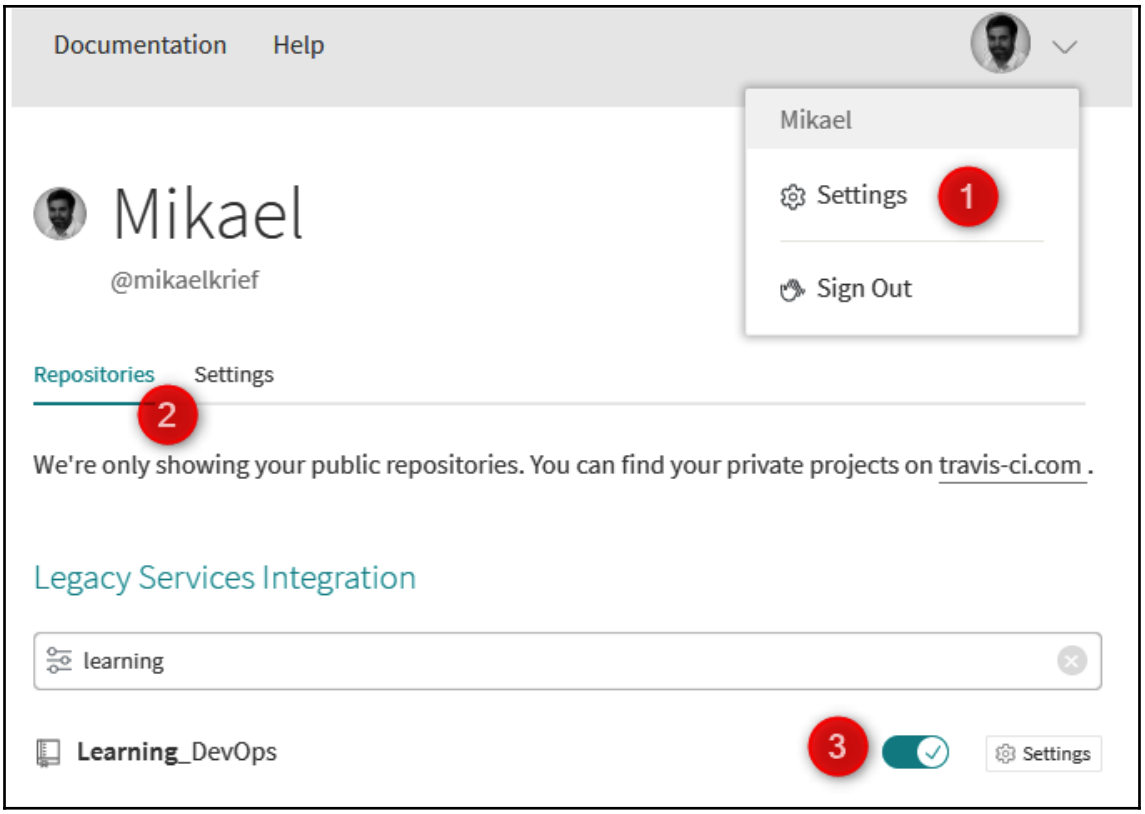
- dependencies: upgrading to Go 1.12 (#3525)
- dependencies: upgrading the `storage` SDK to `2019-04-01` (#3578)
- Data Source `azurerm_app_service` - support windows containers (#3566)
- Data Source `azurerm_app_service_plan` - support windows containers (#3566)
- `azurerm_api_management` - rename `disable_triple_des_chipers` to `disable_triple_des_ciphers` (#3539)
- `azurerm_application_gateway` - support for the value `General` in the `rule_group_name` field within the `disabled_rule_group` block (#3533)
- `azurerm_app_service` - support for windows containers (#3566)
- `azurerm_app_service_plan` - support for the `maximum_elastic_worker_count` property (#3547)
- `azurerm_managed_disk` - support for the `create_option` of `Restore` (#3598)
- `azurerm_app_service_plan` - support for windows containers (#3566)

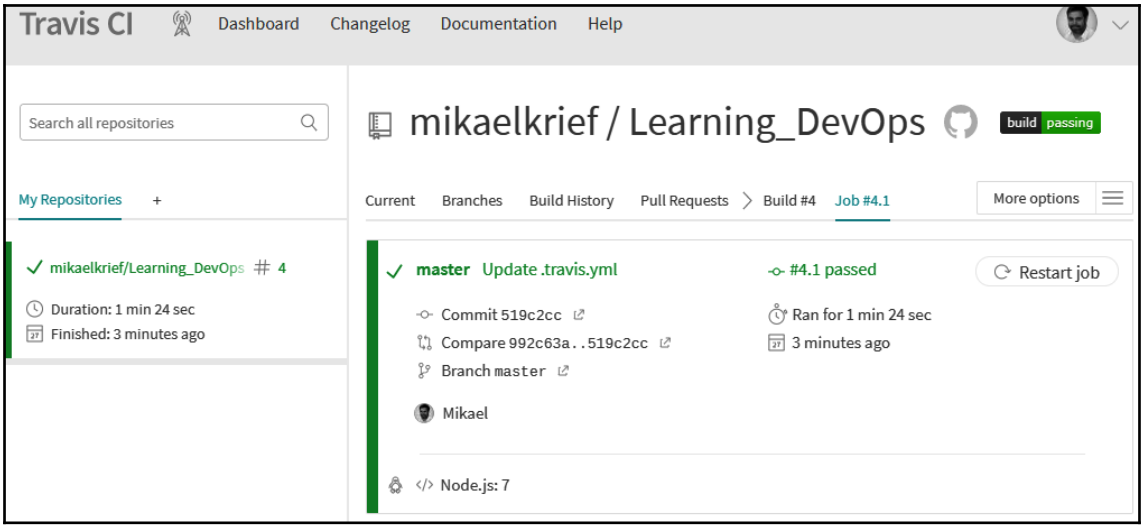



Releases
Tags
v1.0.0
1
@
Target: master
Excellent! This tag will be created from the target when you publish this release.
First Release
2
Write
Preview
This first release contain:
- feature 1
- feature 2
3
Attach files by dragging & dropping, selecting or pasting them.
Attach binaries by dropping them here or selecting them.
4
This is a pre-release
We'll point out that this release is identified as non-production ready.
5
Publish release
Save draft
6

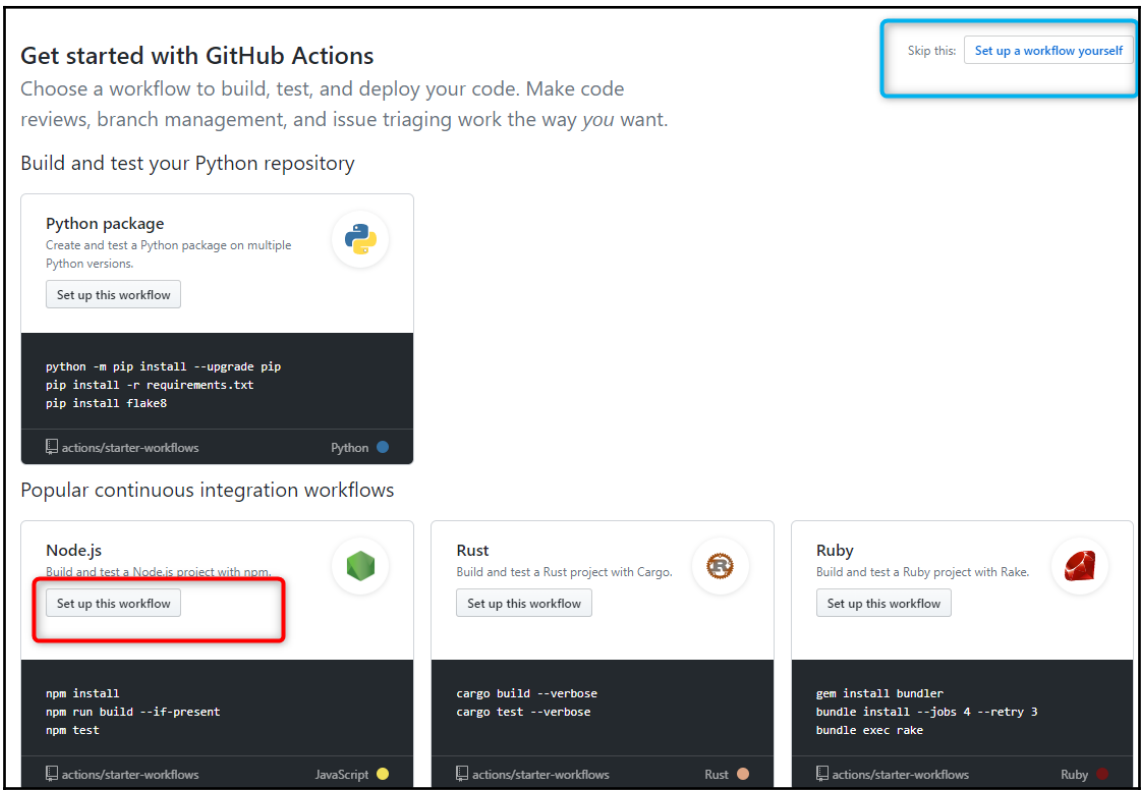

Code
Pull requests 0
Actions
Projects 0
Wiki
Security
Insights
Settings
Releases
Tags
Latest release
v1.0.0
5712a33
Verified
First Release
mikaelkrief released this 9 minutes ago
This first release contain:
feature 1
feature 2
Assets 3
binaries.zip
Source code (zip)
Source code (tar.gz)

Travis CI
About Us
Blog
Status
Documentation
Help
Sign in with GitHub

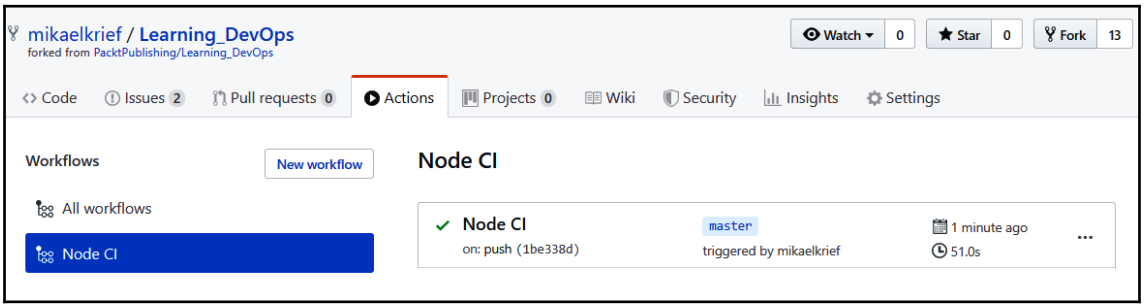

Documentation
Help
Mikael
Settings
1
Sign Out
Mikael
@mikaelkrief
Repositories
Settings
2
We're only showing your public repositories. You can find your private projects on travis-ci.com .
Legacy Services Integration
learning
Learning_DevOps
3
Settings

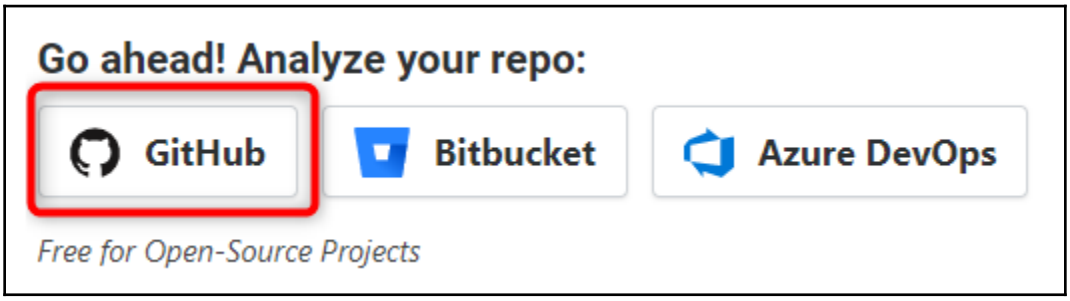

Travis CI
Dashboard
Changelog
Documentation
Help
Search all repositories
My Repositories
+
mikaelkrief/Learning_DevOps # 4
Duration: 1 min 24 sec
Finished: 3 minutes ago
mikaelkrief / Learning_DevOps
build passing
Current
Branches
Build History
Pull Requests
Build #4
Job #4.1
More options
master Update .travis.yml
#4.1 passed
Restart job
Commit 519c2cc
Compare 992c63a..519c2cc
Branch master
Ran for 1 min 24 sec
3 minutes ago
Mikael
Node.js: 7

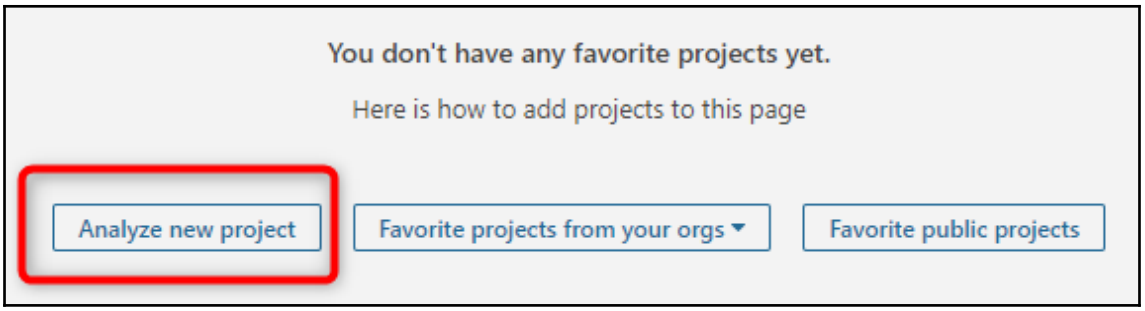
mikaelkrief / Learning_DevOps
forked from PacktPublishing/Learning_DevOps
Watch 0
Star 0
Fork 11
Code
Pull requests 0
Actions
Projects 0
Wiki
Security
Insights
Settings

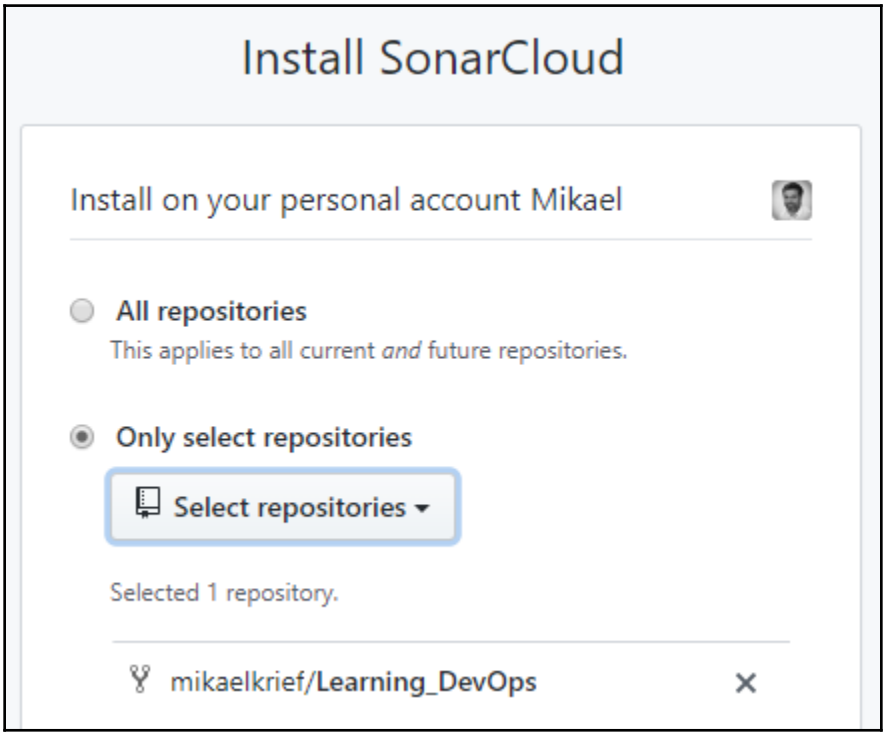

Get started with GitHub Actions
Choose a workflow to build, test, and deploy your code. Make code reviews, branch management, and issue triaging work the way *you* want.
Skip this: Set up a workflow yourself
Build and test your Python repository
Python package
Create and test a Python package on multiple Python versions.
Set up this workflow
python -m pip install --upgrade pip
pip install -r requirements.txt
pip install flake8
actions/starter-workflows
Python
Popular continuous integration workflows
Node.js
Build and test a Node.js project with npm.
Set up this workflow
npm install
npm run build --if-present
npm test
actions/starter-workflows
JavaScript
Rust
Build and test a Rust project with Cargo.
Set up this workflow
cargo build --verbose
cargo test --verbose
actions/starter-workflows
Rust
Ruby
Build and test a Ruby project with Rake.
Set up this workflow
gem install bundler
bundle install --jobs 4 --retry 3
bundle exec rake
actions/starter-workflows
Ruby

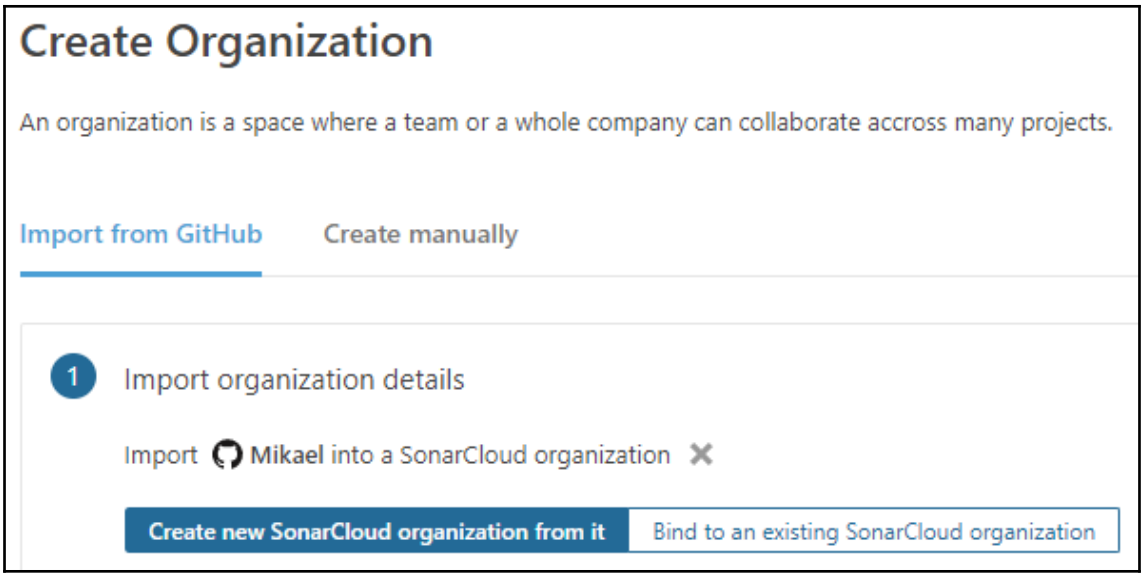
```
14      steps:
15      - uses: actions/checkout@v1
16      - name: Use Node.js ${{ matrix.node-version }}
17        uses: actions/setup-node@v1
18        with:
19          node-version: ${{ matrix.node-version }}
20      - name: npm install, build, and test
21        run: |
22          cd CHAP14/appdemo
23          npm install
24          npm run build --if-present
25          npm test
26        env:
27          CI: true
```

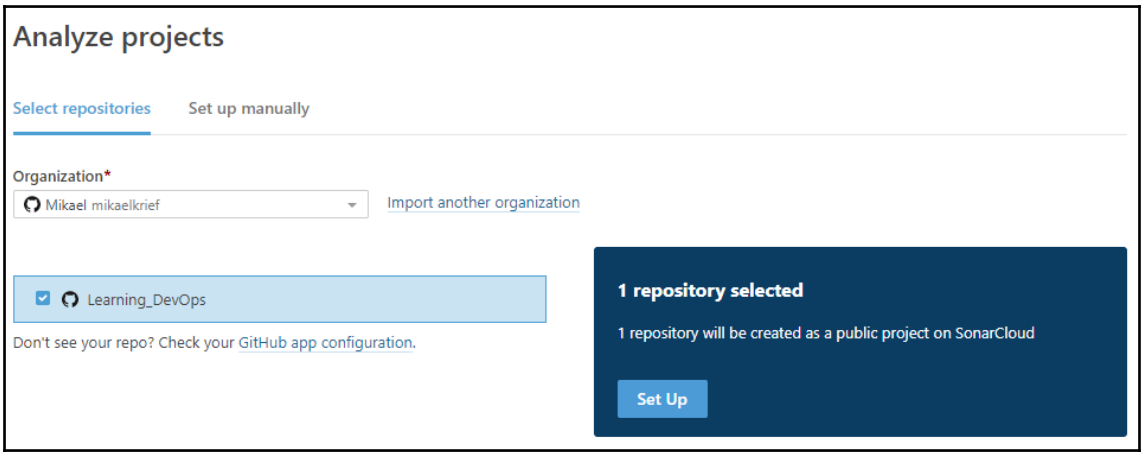


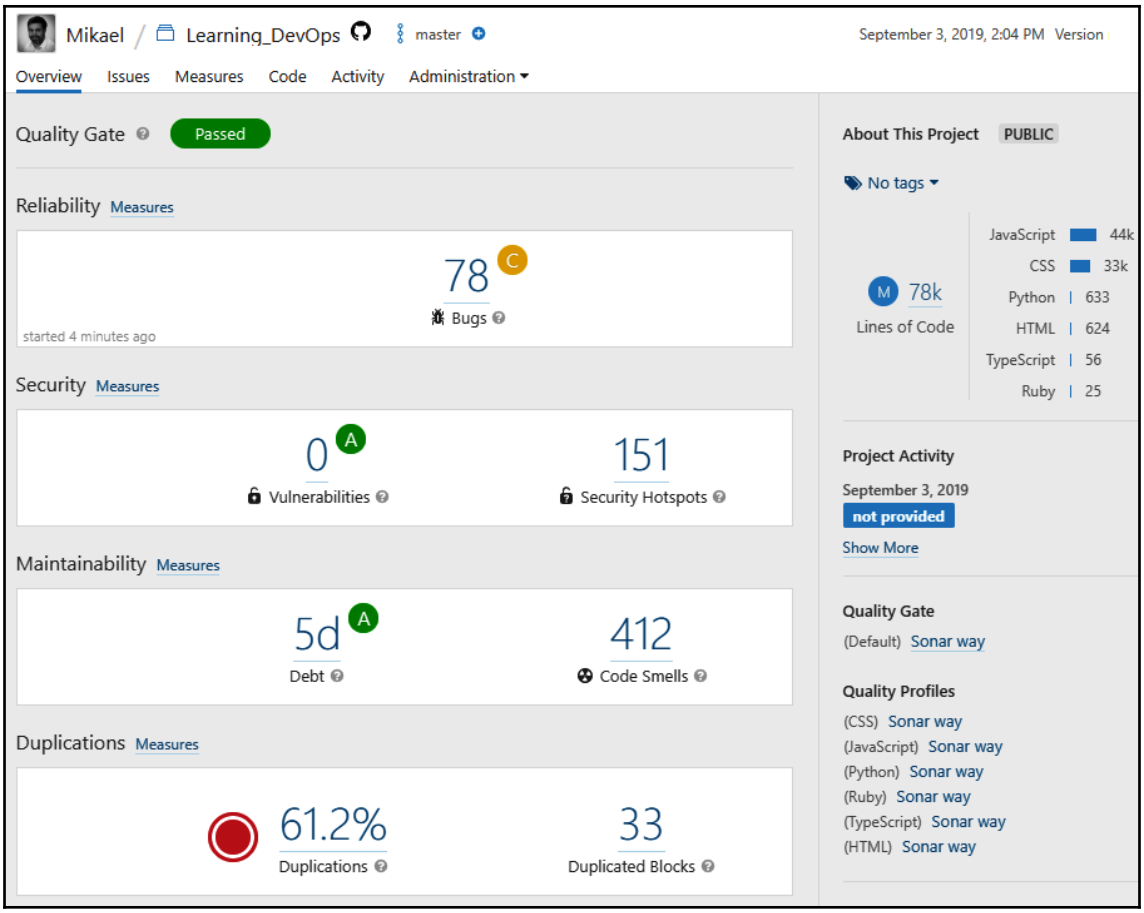


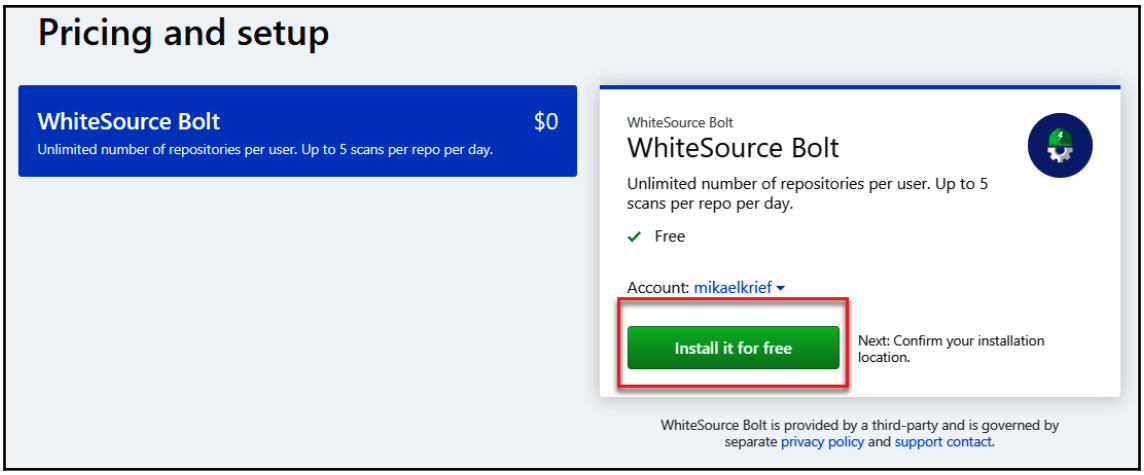

You don't have any favorite projects yet.
Here is how to add projects to this page
Analyze new project
Favorite projects from your orgs
Favorite public projects

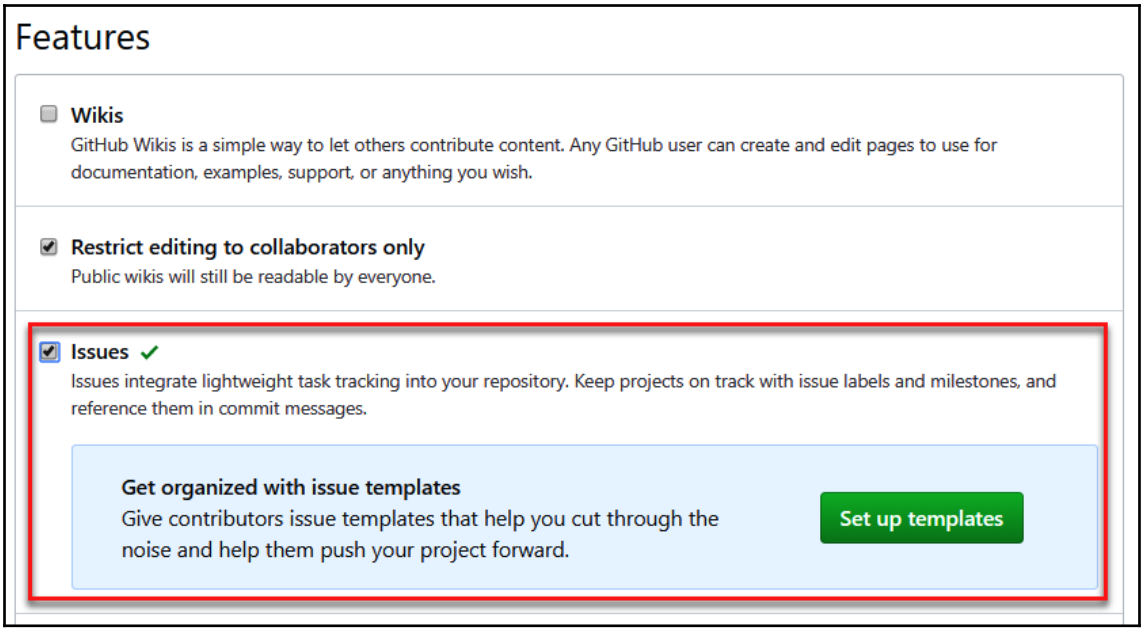

Install SonarCloud
Install on your personal account Mikael
All repositories
This applies to all current and future repositories.
Only select repositories
Select repositories
Selected 1 repository.
mikaelkrief/Learning_DevOps

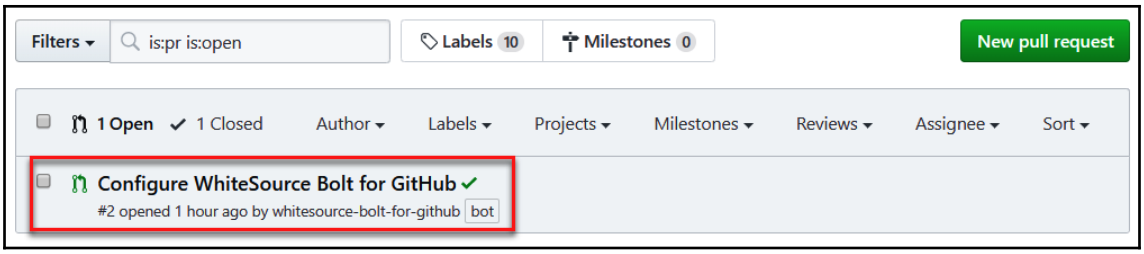

Create Organization
An organization is a space where a team or a whole company can collaborate accross many projects.
Import from GitHub
Create manually
1
Import organization details
Import Mikael into a SonarCloud organization
Create new SonarCloud organization from it
Bind to an existing SonarCloud organization

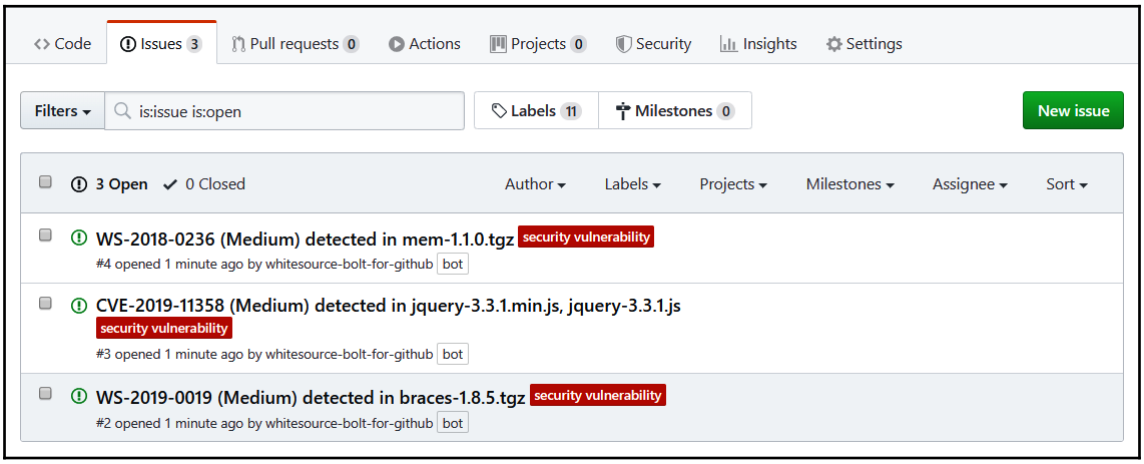

Analyze projects
Select repositories
Set up manually
Organization*
Mikael mikaelkrief
Import another organization
Learning_DevOps
Don't see your repo? Check your GitHub app configuration.
1 repository selected
1 repository will be created as a public project on SonarCloud
Set Up

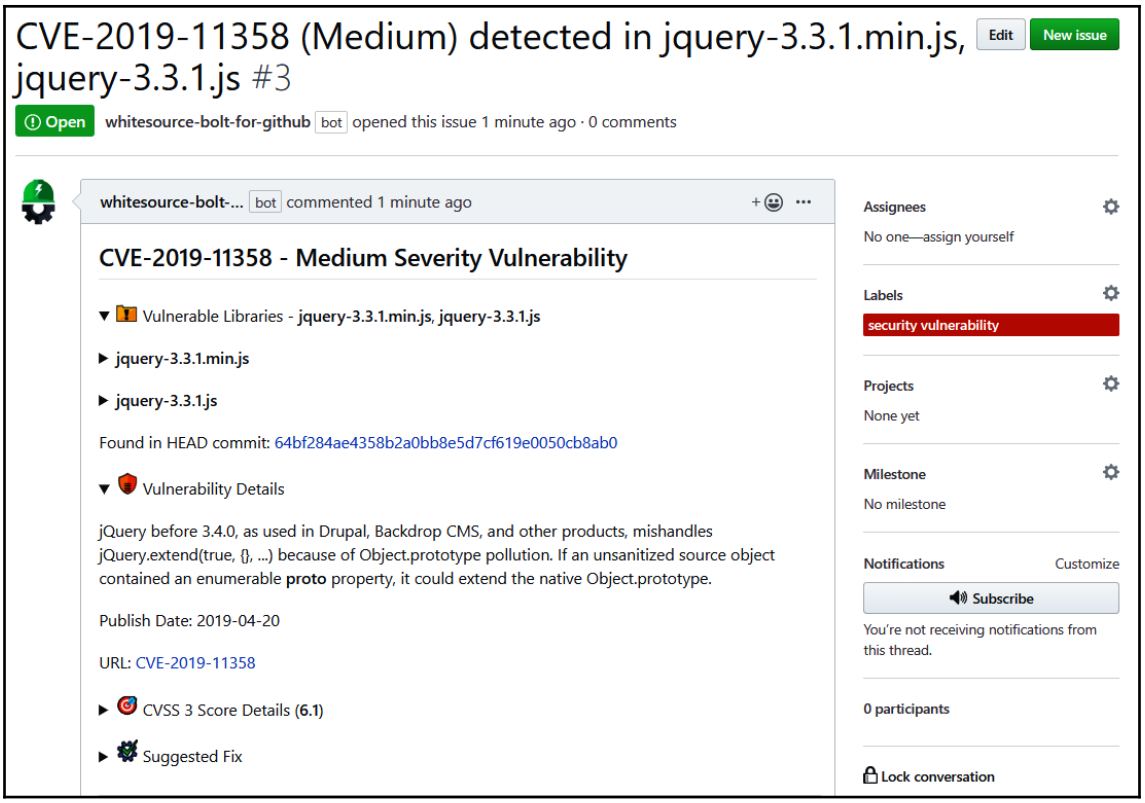

Mikael / Learning_DevOps master
September 3, 2019, 2:04 PM Version
Overview Issues Measures Code Activity Administration
Quality Gate Passed
Reliability Measures
78 C
Bugs
started 4 minutes ago
Security Measures
0 A
Vulnerabilities
151
Security Hotspots
Maintainability Measures
5d A
Debt
412
Code Smells
Duplications Measures
61.2%
Duplications
33
Duplicated Blocks
About This Project PUBLIC
No tags
M 78k
Lines of Code
JavaScript 44k
CSS 33k
Python 633
HTML 624
TypeScript 56
Ruby 25
Project Activity
September 3, 2019
not provided
Show More
Quality Gate
(Default) Sonar way
Quality Profiles
(CSS) Sonar way
(JavaScript) Sonar way
(Python) Sonar way
(Ruby) Sonar way
(TypeScript) Sonar way
(HTML) Sonar way


Pricing and setup
WhiteSource Bolt
$0
Unlimited number of repositories per user. Up to 5 scans per repo per day.
WhiteSource Bolt
WhiteSource Bolt
Unlimited number of repositories per user. Up to 5 scans per repo per day.
Free
Account: mikaelkrief
Install it for free
Next: Confirm your installation location.
WhiteSource Bolt is provided by a third-party and is governed by separate privacy policy and support contact.


Features
Wikis
GitHub Wikis is a simple way to let others contribute content. Any GitHub user can create and edit pages to use for documentation, examples, support, or anything you wish.
Restrict editing to collaborators only
Public wikis will still be readable by everyone.
Issues
Issues integrate lightweight task tracking into your repository. Keep projects on track with issue labels and milestones, and reference them in commit messages.
Get organized with issue templates
Give contributors issue templates that help you cut through the noise and help them push your project forward.
Set up templates


Filters
is:pr is:open
Labels 10
Milestones 0
New pull request
1 Open
1 Closed
Author
Labels
Projects
Milestones
Reviews
Assignee
Sort
Configure WhiteSource Bolt for GitHub
#2 opened 1 hour ago by whitesource-bolt-for-github bot


Code
Issues 3
Pull requests 0
Actions
Projects 0
Security
Insights
Settings
Filters
is:issue is:open
Labels 11
Milestones 0
New issue
3 Open
0 Closed
Author
Labels
Projects
Milestones
Assignee
Sort
WS-2018-0236 (Medium) detected in mem-1.1.0.tgz
security vulnerability
#4 opened 1 minute ago by whitesource-bolt-for-github bot
CVE-2019-11358 (Medium) detected in jquery-3.3.1.min.js, jquery-3.3.1.js
security vulnerability
#3 opened 1 minute ago by whitesource-bolt-for-github bot
WS-2019-0019 (Medium) detected in braces-1.8.5.tgz
security vulnerability
#2 opened 1 minute ago by whitesource-bolt-for-github bot



CVE-2019-11358 (Medium) detected in jquery-3.3.1.min.js, jquery-3.3.1.js #3

Edit | New issue

Open | whitesource-bolt-for-github bot opened this issue 1 minute ago · 0 comments

whitesource-bolt-... bot commented 1 minute ago

CVE-2019-11358 - Medium Severity Vulnerability

▼ Vulnerable Libraries - **jquery-3.3.1.min.js**, **jquery-3.3.1.js**

▶ **jquery-3.3.1.min.js**

▶ **jquery-3.3.1.js**

Found in HEAD commit: 64bf284ae4358b2a0bb8e5d7cf619e0050cb8ab0

▼ Vulnerability Details

jQuery before 3.4.0, as used in Drupal, Backdrop CMS, and other products, mishandles jQuery.extend(true, {}, ...) because of Object.prototype pollution. If an unsanitized source object contained an enumerable **proto** property, it could extend the native Object.prototype.

Publish Date: 2019-04-20

URL: CVE-2019-11358

▶ CVSS 3 Score Details (**6.1**)

▶ Suggested Fix

Assignees
No one—assign yourself

Labels
security vulnerability

Projects
None yet

Milestone
No milestone

Notifications Customize
Subscribe
You're not receiving notifications from this thread.

0 participants

Lock conversation