

Setup CluedIn Docker Desktop in Ubuntu in Azure

Monday, 10 January 2022 9:41 AM

10 Jan 2022 uploaded to <https://github.com/CluedIn-io/ImpTools/tree/master/docker/ubuntu>

Objective

To have docker environment that is suitable for CluedIn training.

Method

Setup Azure Ubuntu VM

Microsoft Azure

Search resources, services, and docs (G+/)

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Create a virtual machine

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ CluedIn

Resource group * ⓘ APAC

Create new

Instance details

Virtual machine name * ⓘ UbuntuCluedInAPACDemo2

Region * ⓘ (Asia Pacific) Australia East

Availability options ⓘ No infrastructure redundancy required

Security type ⓘ Standard

Image * ⓘ Ubuntu Server 20.04 LTS - Gen1

See all images | Configure VM generation

Azure Spot instance ⓘ ☐

Size * ⓘ Standard_F16s_v2 - 16 vcpus, 32 GiB memory (DKK 4,079.63/month)

See all sizes

note: F16s_v2 is preferred, however, it is also possible to use D8s_v3 with the caveat that it is too slow as soon as you try to do anything serious - the 32 GiB memory is critical.

note: F16s_v2 is around \$625 USD per month - D8s_v3 is around \$350 USD per month as of Jan 2022

Size * ⓘ Standard_D8s_v3 - 8 vcpus, 32 GiB memory (DKK 2,297.09/month)

See all sizes

Administrator account

Authentication type ⓘ

☒ SSH public key

☐ Password

Administrator account

Authentication type ⓘ

- ☒ SSH public key
☐ Password

i Azure now automatically generates an SSH key pair for you and allows you to store it for future use. It is a fast, simple, and secure way to connect to your virtual machine.

Username * ⓘ

azureuser ✓

If this is the first ubuntu VM then you want to generate a new key pair:

Suggest a name something like UbuntuCluedIn[project name]_Key

SSH public key source

Generate new key pair ✓

Key pair name *

UbuntuCluedInAPACDemo_key ✓

Otherwise, you can reuse an existing key if that makes sense for your situation:

SSH public key source

Use existing key stored in Azure ✓

Stored Keys

UbuntuCluedInAPACDemo_key ✓

Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * ⓘ

- ☐ None
☒ Allow selected ports

Select inbound ports *

SSH (22) ✓

⚠ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

Basics **Disks** Networking Management Advanced Tags Review + create

Azure VMs have one operating system disk and a temporary disk for short-term storage. You can attach additional data disks. The size of the VM determines the type of storage you can use and the number of data disks allowed. [Learn more](#) ↗

Disk options

OS disk type * ⓘ

Standard SSD (locally-redundant storage) ✓

If performance is critical for your workloads, choose Premium SSD disks for lower latency, higher IOPS and bandwidth, and bursting. [Learn more](#)

Encryption type *

(Default) Encryption at-rest with a platform-managed key ✓

Enable Ultra Disk compatibility ⓘ

☐

Ultra disk is supported in Availability Zone(s) 1,2,3 for the selected VM size Standard_F16s_v2.

Network interface

When creating a virtual machine, a network interface will be created for you.

Virtual network *	<div>APAC-vnet</div> <div>Create new</div>
Subnet *	<div>default (10.0.0.0/24)</div> <div>Manage subnet configuration</div>
Public IP	<div>(new) UbuntuCluedInAPACDemo2-ip</div> <div>Create new</div>
NIC network security group	<div><input type="radio"/> None</div> <div><input checked="" type="radio"/> Basic</div> <div><input type="radio"/> Advanced</div>
Public inbound ports *	<div><input type="radio"/> None</div> <div><input checked="" type="radio"/> Allow selected ports</div>
Select inbound ports *	<div>SSH (22)</div>

⚠ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

Accelerated networking ☒

Rest are defaults then create it

When generating a new key pair, ensure you download it and save it for use later

Generate new key pair

i An SSH key pair contains both a public key and a private key. **Azure doesn't store the private key.** After the SSH key resource is created, you won't be able to download the private key again. [Learn more](#)

Download private key and create resource

Return to create a virtual machine

✓ Your deployment is complete



Deployment name: CreateVm-canonical.0001-com-ubuntu-server-f...
Subscription: [CluedIn](#)
Resource group: [APAC](#)

Start time: 11/22/2021, 10:14:53 PM
Correlation ID: 31daf7c7-6e98-4950-bbf3-f0eab75d05f9

✓ Deployment details ([Download](#))

^ Next steps

[Setup auto-shutdown](#) Recommended

[Monitor VM health, performance and network dependencies](#) Recommended

[Run a script inside the virtual machine](#) Recommended

[Go to resource](#)

[Create another VM](#)

Setup Docker and Dependencies

Login as azureuser

(see [Example putty settings - showing ssh tunnels](#))

The setups below will download helpful setup script from [Implementation Tools github repo](#) and execute it

The helpful setup script is [here](#) for you to examine prior to executing

azureuser@Ubuntu:~\$

```
curl -O https://raw.githubusercontent.com/CluedIn-io/ImpTools/master/docker/ubuntu/docker-bootstrap.sh
chmod a+x docker-bootstrap.sh
sudo ./docker-bootstrap.sh
```

run script again to check all installed

```
azureuser@Ubuntu:~$ sudo ./docker-bootstrap.sh
net-tools already installed

docker already installed
Docker version 20.10.11, build dea9396

docker-compose already installed
docker-compose version 1.29.2, build 5becea4c

powershell already installed
PowerShell 7.1.5
finished!!!
```

```
# ensure any dependencies are installed from apt
sudo apt --fix-broken install
```

Sample Install Cluedin Session

follow <https://cluedin-io.github.io/Home/>

```
# clone the official CluedIn Home repo
git clone https://github.com/CluedIn-io/Home.git
cd Home
sudo docker login
[your docker username here]
[your docker password here]

# run powershell as root
sudo pwsh
.\cluedin.ps1 env latest -Tag latest
.\cluedin.ps1 check latest
+-----+
| CluedIn - Pre-Flight Check |
+-----+
Installed Applications
[1/3] ✓ » PowerShell : 7.1.5 / Core
[2/3] ✓ » Docker : 20.10.11 / linux
[3/3] ✓ » Docker Compose : 1.29.2
Available Ports
[1/23] ✓ » CluedIn UI : 127.0.0.1.nip.io:9080
[2/23] ✓ » CluedIn API : 127.0.0.1.nip.io:9000
[3/23] ✓ » CluedIn Auth : 127.0.0.1.nip.io:9001
[4/23] ✓ » CluedIn Jobs : 127.0.0.1.nip.io:9003
[5/23] ✓ » CluedIn WebHooks : 127.0.0.1.nip.io:9006
[6/23] ✓ » CluedIn Public : 127.0.0.1.nip.io:9007
[7/23] ✓ » CluedIn Web Api : 127.0.0.1.nip.io:9008
[8/23] ✓ » CluedIn Clean : 127.0.0.1.nip.io:9009
[9/23] ✓ » CluedIn Annotation : 127.0.0.1.nip.io:9010
[10/23] ✓ » CluedIn Datasource : 127.0.0.1.nip.io:9011
```

```

[11/23] ✓ » CluedIn Submitter : 127.0.0.1.nip.io:9012
[12/23] ✓ » CluedIn Gql : 127.0.0.1.nip.io:8888
[13/23] ✓ » Neo4j Http : localhost:7474
[14/23] ✓ » Neo4j Bolt : localhost:7687
[15/23] ✓ » Elasticsearch Data : localhost:9200
[16/23] ✓ » Elasticsearch Http : localhost:9300
[17/23] ✓ » RabbitMQ Data : localhost:5672
[18/23] ✓ » RabbitMQ Http : localhost:15672
[19/23] ✓ » Redis : localhost:6379
[20/23] ✓ » Seq UI : localhost:3200
[21/23] ✓ » Seq Data : localhost:5341
[22/23] ✓ » Sql Server : localhost:1433
[23/23] ✓ » OpenRefine : localhost:3333
Authentication
[1/1] ✓ » Docker Registry : https://index.docker.io/v1/
Environment
[1/2] ✓ » Docker - Memory : 31.36gb available
[2/2] ✓ » Docker - CPU : 16 cpus available

```

.\cluedin.ps1 up latest

```

PS /home/azureuser/Home> .\cluedin.ps1 status
+-----+
| CluedIn - Status Check |
+-----+
Can Connect
[1/1] ✓ » Is Up : http://127.0.0.1.nip.io:9000/status
DataShards
[1/6] ✓ » Blob
[2/6] ✓ » Configuration
[3/6] ✓ » Data
[4/6] ✓ » Search
[5/6] ✓ » Graph
[6/6] ✓ » Metrics
Components
[1/6] ✓ » Api
[2/6] ✓ » Authentication
[3/6] ✓ » Crawling
[4/6] ✓ » Scheduling
[5/6] ✓ » ServiceBus
[6/6] ✓ » System

```

.\cluedin.ps1 stop latest

.\cluedin.ps1 start latest

.\cluedin.ps1 up latest

poll until all up
./cluedin.ps1 status

example org to create

./cluedin.ps1 createorg -name cluedin -pass AWXqwg12!

```

+-----+
| CluedIn - Create Organization |
+-----+

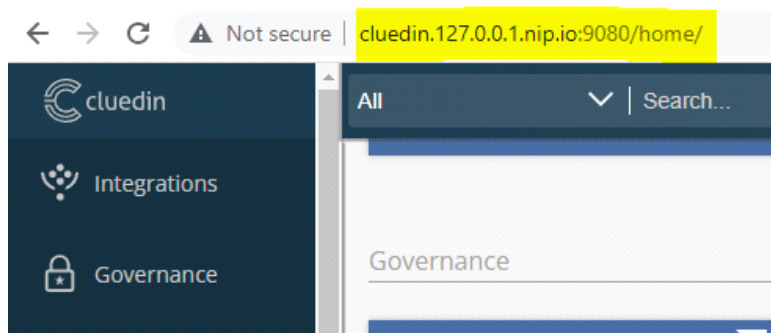
Active                : True
ApplicationSubDomain  : cluedin
CustomerId            :
ExternalAuthenticationId :
EmailDomainName       : cluedin.com
Id                    : f49beb87-420b-4091-9e1f-9973649e50d0
IsEmailDomainSignupActivated : False
LastLoginTime         : 11/22/2021 12:50:52
Name                  : cluedin
Plan                  : 6749e7a5-da15-47e2-918b-6a385e288865
PlanEndDate           : 12/22/2021 12:50:52
PlanIsActive          : True
PlanStartDate         : 11/22/2021 12:50:52
RefreshTokenLifeTime  : 14400
SubscriptionId        :

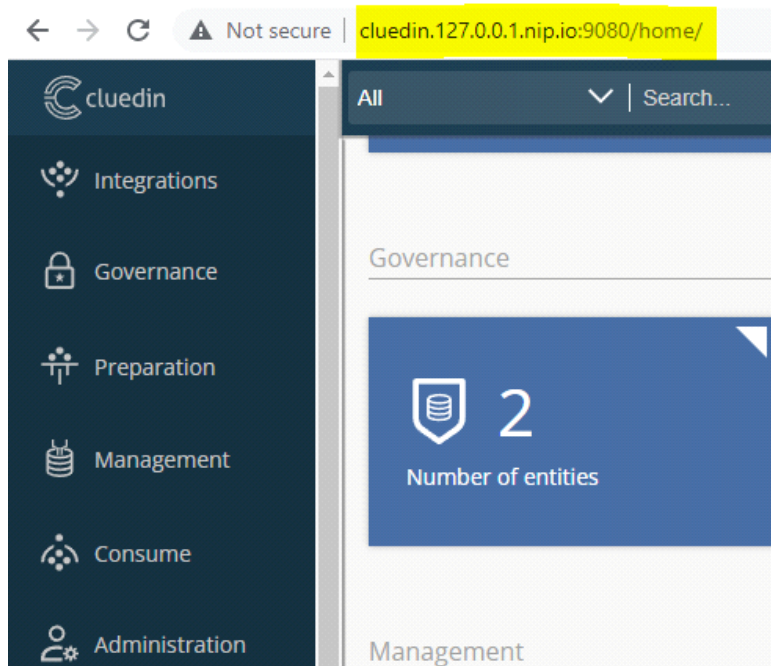
Email: admin@cluedin.com
Password: AWXqwg12!

```

Test it with ssh tunnels

<http://cluedin.127.0.0.1.nip.io:9080/>





Example putty settings - showing ssh tunnels

