Setup CluedIn Docker Desktop in Ubuntu in Azure

Monday, 10 January 2022 9:41 AM

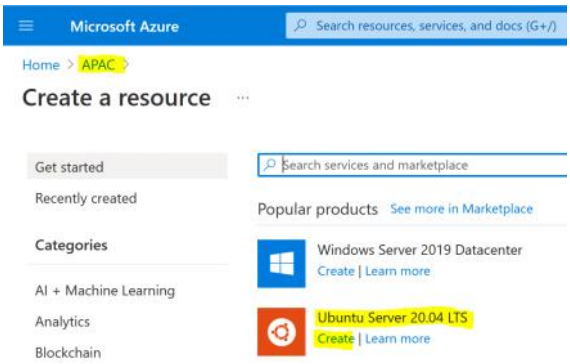
10 Jan 2022 uploaded to https://github.com/CluedIn-io/ImpTools/tree/master/docker/ubuntu

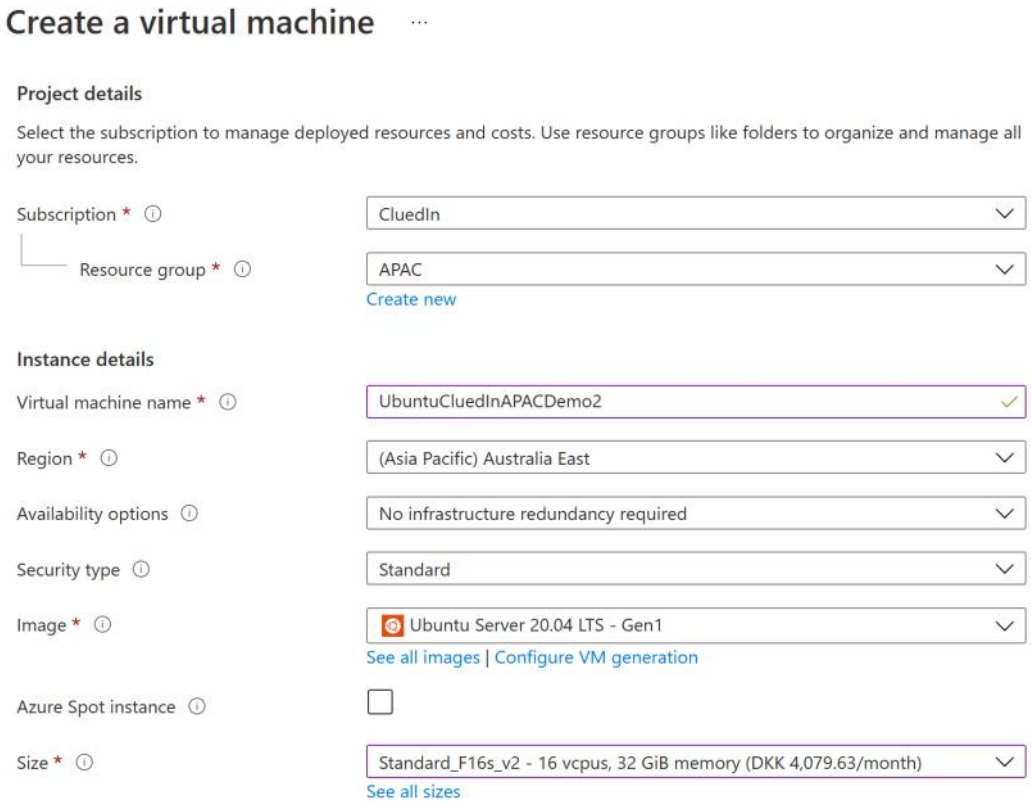
Objective

To have docker environment that is suitable for CluedIn training.

Method

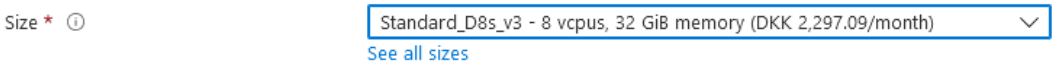
Setup Azure Ubuntu VM

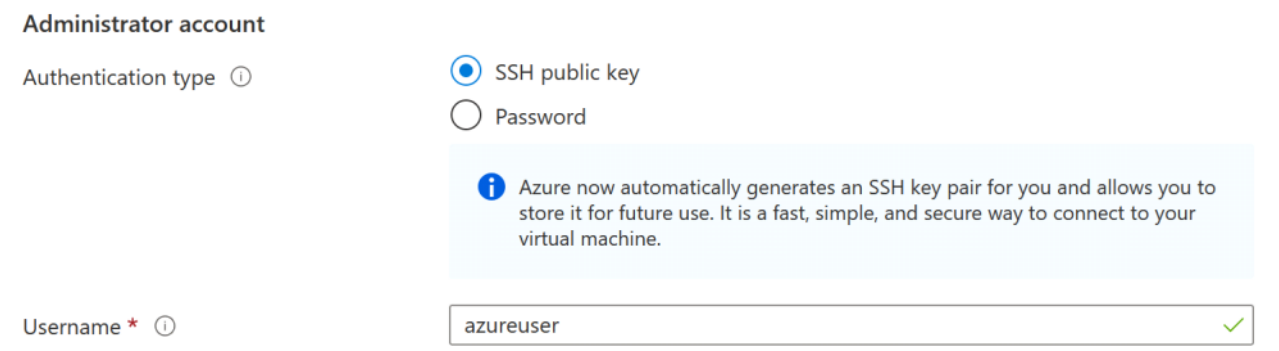




note: F16s_v2 is prefered, however, it is also possible to use D8s_v3 with the cavet that it is too slow as soon as you try to do anything serious - the 32 GiB memory is critical.

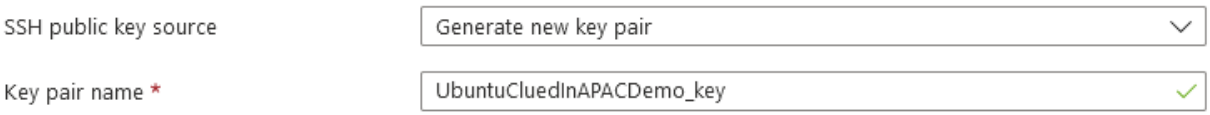
note: F16s_v2 is around $625 USD per month - D8s_v3 is around $350 USD per month as of Jan 2022



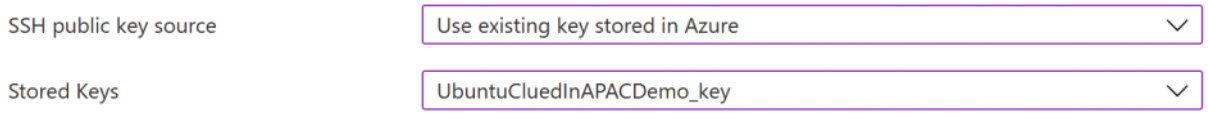


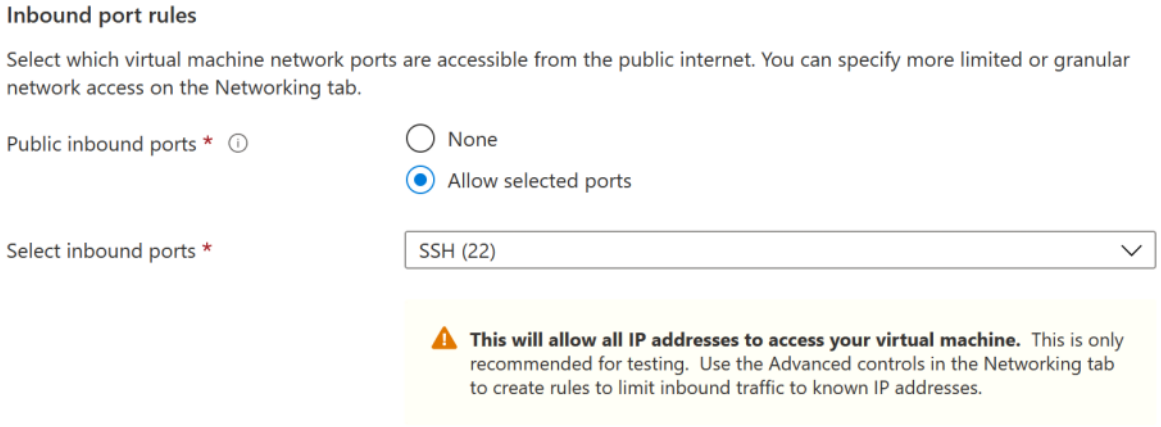
If this is the first ubuntu VM then you want to generate a new key pair:

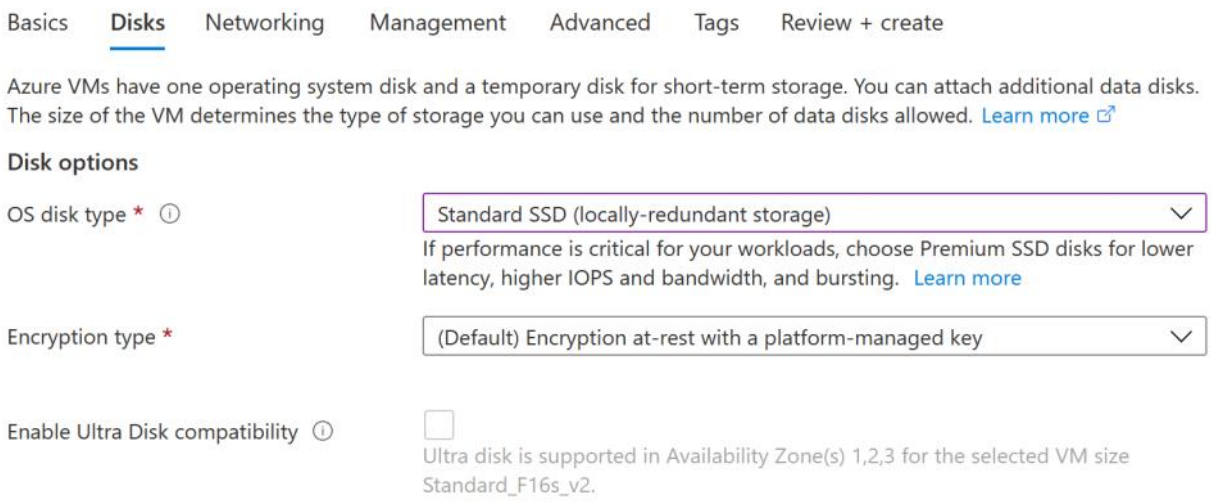
Suggest a name something like UbuntuCluedIn[project name]_Key



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







Network interface

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

Virtual network * : APAC-vnet
Create new

Subnet * : default (10.0.0.0/24)
Manage subnet configuration

Public IP : (new) UbuntuCluedInAPACDemo2-ip
Create new

NIC network security group : None / Basic / Advanced

Public inbound ports * : None / Allow selected ports

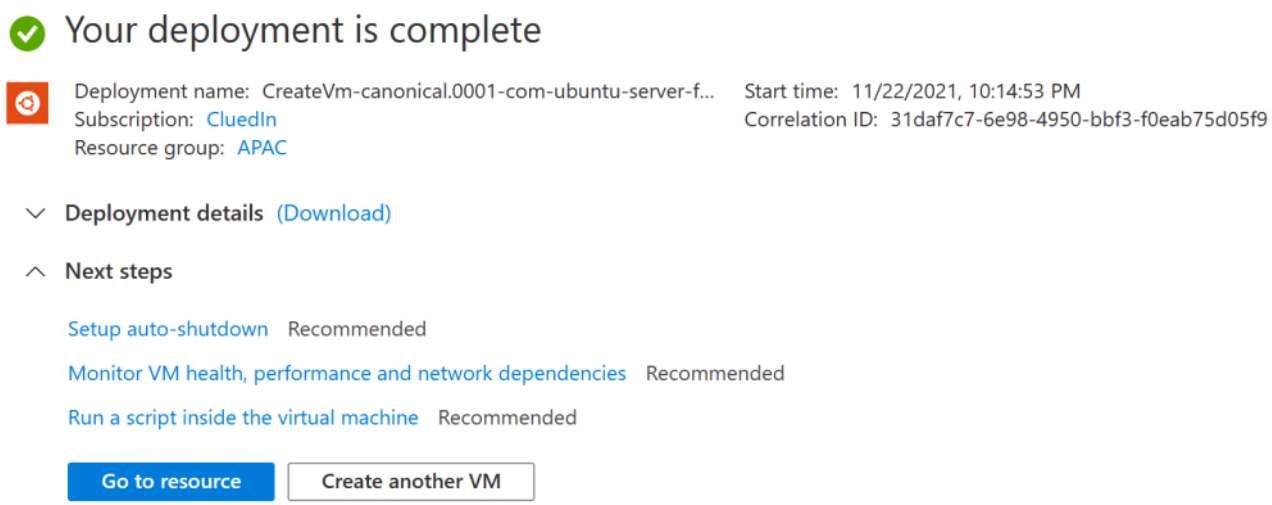
Select inbound ports * : SSH (22)

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.

Accelerated networking

Rest are defaults then create it

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



Setup Docker and Dependancies

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 dependancies 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
```

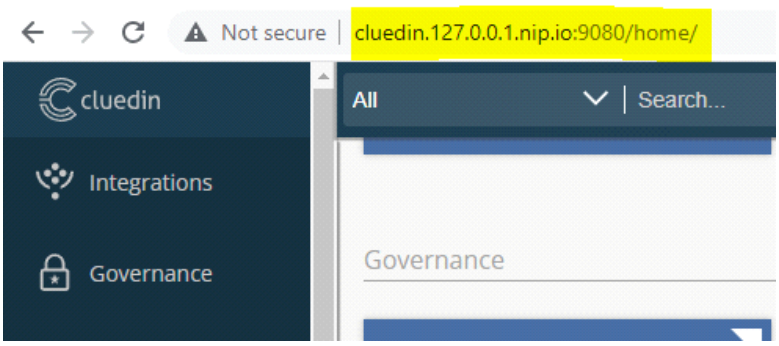
```
.\cluedin.ps1 stop latest
.\cluedin.ps1 start latest
.\cluedin.ps1 up latest

# poll until all up
./cluedin.ps1 status
```

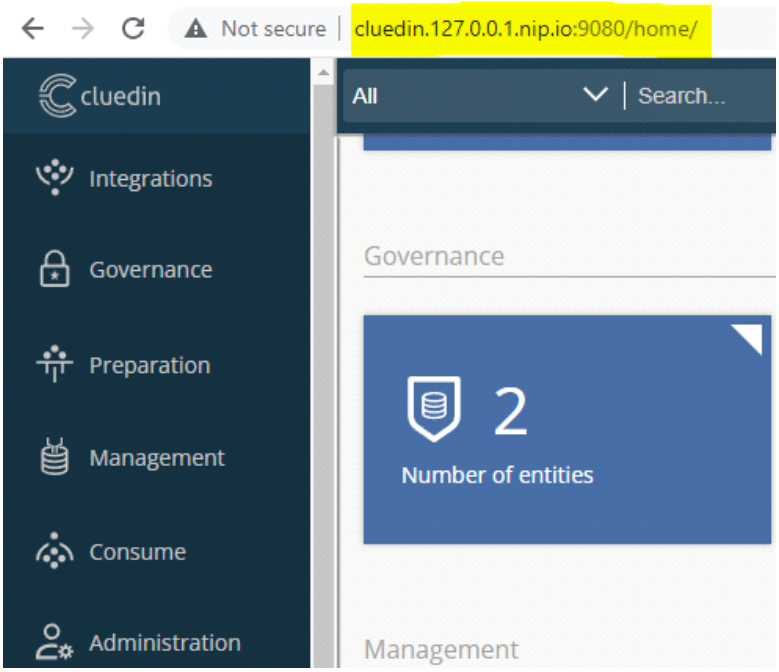
```
# example org to create
./cluedin.ps1 createorg -name cluedin -pass AWXqwg12!
```

```
+--------------------------------+
| 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!
```

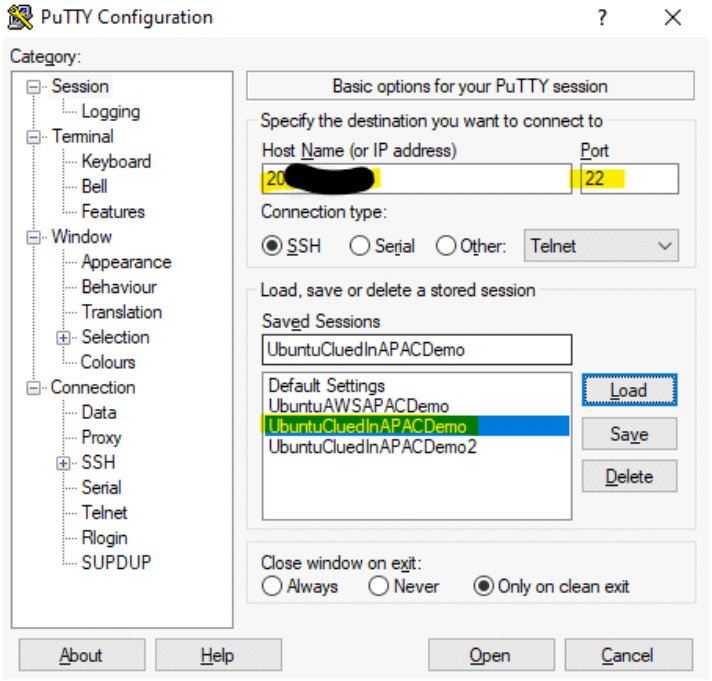
Test it with ssh tunnels

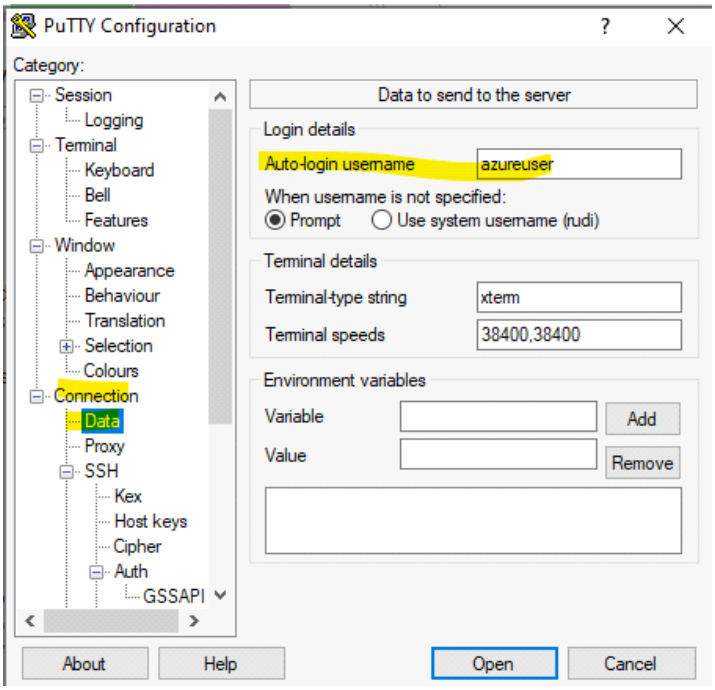
http://cluedin.127.0.0.1.nip.io:9080/

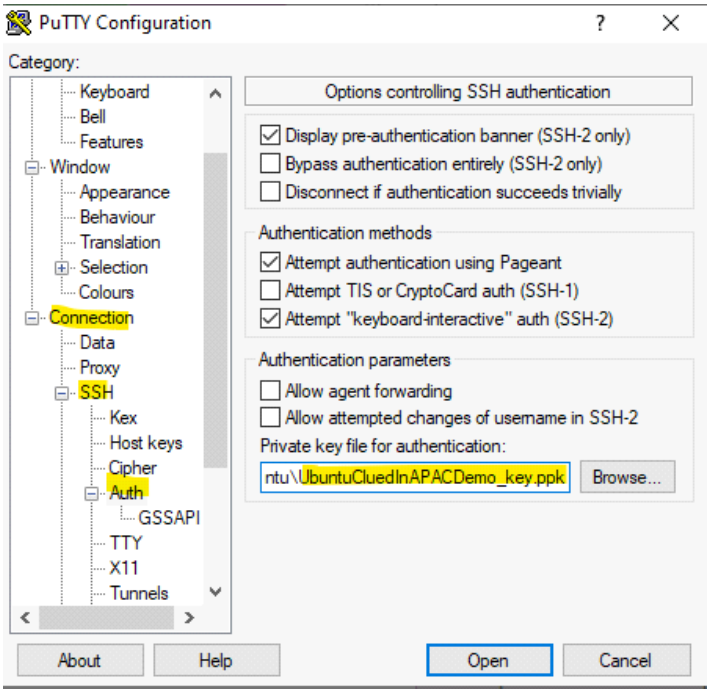




Example putty settings - showing ssh tunnels




PuTTY Configuration
Category:
Session
Logging
Terminal
Keyboard
Bell
Features
Window
Appearance
Behaviour
Translation
Selection
Colours
Connection
Data
Proxy
SSH
Kex
Host keys
Cipher
Auth
GSSAPI
Data to send to the server
Login details
Auto-login username
azureuser
When username is not specified:
Prompt
Use system username (rudi)
Terminal details
Terminal-type string
xterm
Terminal speeds
38400,38400
Environment variables
Variable
Add
Value
Remove
About
Help
Open
Cancel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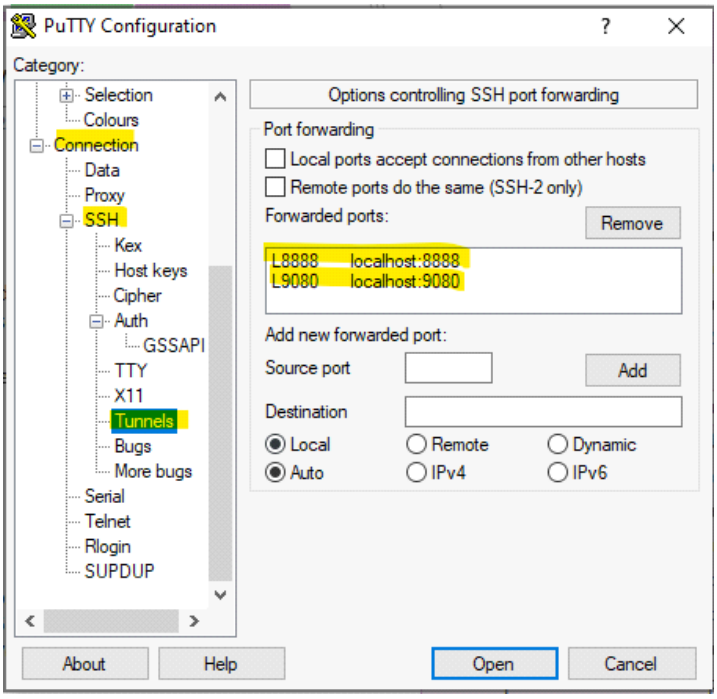
Behaviour
Translation
Selection
Colours
Connection
Data
Proxy
SSH
Kex
Host keys
Cipher
Auth
GSSAPI
TTY
X11
Tunnels
Options controlling SSH authentication
Display pre-authentication banner (SSH-2 only)
Bypass authentication entirely (SSH-2 only)
Disconnect if authentication succeeds trivially
Authentication methods
Attempt authentication using Pageant
Attempt TIS or CryptoCard auth (SSH-1)
Attempt "keyboard-interactive" auth (SSH-2)
Authentication parameters
Allow agent forwarding
Allow attempted changes of username in SSH-2
Private key file for authentication:
ntu\UbuntuCluedInAPACDemo_key.ppk
Browse...
About
Help
Open
Cancel


PuTTY Configuration
Category:
Selection
Colours
Connection
Data
Proxy
SSH
Kex
Host keys
Cipher
Auth
GSSAPI
TTY
X11
Tunnels
Bugs
More bugs
Serial
Telnet
Rlogin
SUPDUP
Options controlling SSH port forwarding
Port forwarding
Local ports accept connections from other hosts
Remote ports do the same (SSH-2 only)
Forwarded ports:
Remove
L8888 localhost:8888
L9080 localhost:9080
Add new forwarded port:
Source port
Add
Destination
Local
Remote
Dynamic
Auto
IPv4
IPv6
About
Help
Open
Cancel