DevOps for Web Developers

Mitesh Soni

Video 6.4

Creating and Configuring a Virtual Machine in Microsoft Azure

Packt udemy

In this Video, we are going to take a look at...

- Creating a virtual machine in Microsoft Azure
- Verifying the newly created virtual machine

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Microsoft Azure

Your subscription file is being generated, and the download will begin shortly.

This file contains secure credentials and additional information about subscriptions that you can use in your development environment. Click here if the download does not start automatically.

1 Sign up for Windows Azure preview features

Sign up for Windows Azure preview features that you are interested in.

2 Save a local copy of the publishSettings file

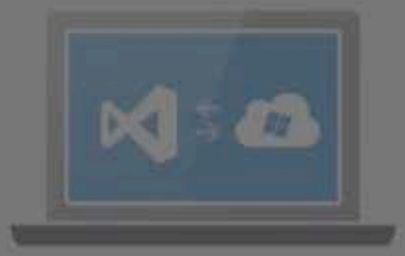
Warning This file contains an encoded management certificate. It serves as your credentials to administer your subscriptions and related services. Store this file in a secure location or delete it after you use it.

3 Import the publishSettings file

Run the following command

```
azure account import
```

Microsoft Azure



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Run the following command

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Open | knife.rb ~/.chef | Save

knife.rb | knife.rb

```
# See http://docs.chef.io/config_rb_knife.html for more information on knife configuration options

current_dir = File.dirname(__FILE__)
log_level                :info
log_location             STDOUT
node_name                "packt"
client_key               "#{current_dir}/packt.pem"
chef_server_url          "https://api.chef.io/organizations/packt"
cookbook_path            ["#{current_dir}/../cookbooks"]
knife[:azure_publish_settings_file] = "Free Trial-12-7-2016-credentials.publishsettings"
```

Applications Places gedit Wed 13:25

Open knife.rb ~/.chef Save

knife.rb knife.rb

```
# See http://docs.chef.io/config_rb_knife.html for more information on knife configuration options

current_dir = File.dirname(__FILE__)
log_level                :info
log_location             STDOUT
node_name                "packt"
client_key               "#{current_dir}/packt.pem"
chef_server_url          "https://api.chef.io/organizations/packt"
cookbook_path            ["#{current_dir}/../cookbooks"]
knife[:azure_publish_settings_file] = "Free Trial-12-7-2016-credentials.publishsettings"
```

01:08 02:23 Ln 10, Col 83 INS

[user@localhost:~] 01:08/02:23

Parameters for VM in Microsoft Azure

Parameter	Value	description
--azure-dns-name	videotestingoutlook	DNS name
--azure-vm-name	tomcatserver1	Virtual machine name
--azure-vm-size	Small	Virtual machine size
-N	DevOpsVMonAzure2	Name of the Chef node
--azure-storage-account	classicstorage9883	Azure storage account
--bootstrap-protocol	cloud-api	Bootstrap protocol

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Parameters for VM in Microsoft Azure

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Parameters for VM in Microsoft Azure

--azure-source-image	5112500ae3b842c8b9c604889f8753c3__OpenLogic-CentOS-67-20160310	Name of the Azure source image
--azure-service-location	Central US	Azure location to host virtual machine
--ssh-user	dtechno	SSH user
--ssh-password	<YOUR PASSWORD>	SSH password
-r	role[v-tomcat]	Chef role
--ssh-port	22	SSH port

Packt> udemy

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user@localhost:~/Desktop/chef/chef-repo

File Edit View Search Terminal Help

```
[user@localhost chef-repo]$ knife azure server create --azure-dns-name 'videotestingoutlook' --azure-vm-name 'dtserver02' --az
ure-vm-size 'Small' -N 'DevOpsVMonAzure3' --azure-source-image '5112500ae3b842c8b9c604889f8753c3__OpenLogic-CentOS-72-20161026
' --azure-service-location 'Central US' --ssh-user 'user' --ssh-password 'cloud@123' -r 'role[v-tomcat]' --bootstrap-protocol
ssh
```

user@localhost:~/Desktop/chef/chef-repo

File Edit View Search Terminal Help

```
52.173.73.34 Thank you for installing Chef!
52.173.73.34 Starting the first Chef Client run...
52.173.73.34 Starting Chef Client, version 12.17.44
52.173.73.34 Creating a new client identity for DevOpsVMonAzure using the validator key.
52.173.73.34 resolving cookbooks for run list: ["tomcat"]
52.173.73.34 Synchronizing Cookbooks:
52.173.73.34   - tomcat (2.3.4)
52.173.73.34   - compat_resource (12.16.2)
52.173.73.34 Installing Cookbook Gems:
52.173.73.34 Compiling Cookbooks...
52.173.73.34 [2016-12-13T10:08:43+00:00] WARN: The default tomcat recipe does nothing. See the readme for information on using
 the tomcat resources
52.173.73.34 Converging 0 resources
52.173.73.34
52.173.73.34 Running handlers:
52.173.73.34 Running handlers complete
52.173.73.34 Chef Client finished, 0/0 resources updated in 08 seconds

DNS Name: packt-tomcatserver.cloudapp.net
VM Name: tomcatserver1
Size: Small
Azure Source Image: 5112500ae3b842c8b9c604889f8753c3__OpenLogic-CentOS-72-20161026
Azure Service Location: Central US
Public Ip Address: 52.173.73.34
Private Ip Address: 100.117.170.35
SSH Port: 22
Environment: _default
Runlist: ["role[v-tomcat]"]

[user@localhost chef-repo]$
```

Chef Manage – Mozilla Firefox

Chef Manage | All resources - Micros...

https://manage.chef.io/organizations/packt/nodes

Search

CHEF MANAGE

Nodes | Reports | Policy | Administration

Feedback | Organization packt | Signed in as Video Packt | 0 | 0

> Nodes

Delete
Manage Tags
Reset Key
Edit Run List
Edit Attributes

Showing **All Nodes**

Search Nodes...

Node Name	Platform	FQDN	IP Address	Uptime	Last Check-In	Environment	Actions
tomcatserver	centos	localhost	192.168.6.246	3 hours	8 days ago	_default	
DevOpsVMonAWS	amazon	ip-172-31-29-225.us-...	172.31.29.225	a minute	4 days ago	_default	

Please select a node

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Feedback What's New? About Chef Manage

Chef Manage – Mozilla Firefox

Chef Manage | All resources - Micros...

https://manage.chef.io/organizations/packt/nodes/DevOpsVMonAzure

Search

CHEF MANAGE

Nodes | Reports | Policy | Administration | Feedback | Organization packt | Signed in as Video Packt | 0 | 0

> Nodes

- Delete
- Manage Tags
- Reset Key
- Edit Run List
- Edit Attributes

Showing **All Nodes**

Search Nodes...

Node Name	Platform	FQDN	IP Address	Uptime	Last Check-In	Environment	Actions
DevOpsVMonAzure	centos	tomcatserver1.packt-t...	100.117.170.35	3 minutes	a minute ago	_default	
tomcatserver	centos	localhost	192.168.6.246	3 hours	8 days ago	_default	
DevOpsVMonAWS	amazon	ip-172-31-29-225.us-...	172.31.29.225	a minute	4 days ago	_default	

Node: **DevOpsVMonAzure**

Details | Attributes | Permissions

Last Check In: **A Minute Ago**
2016-12-13 10:08:38 UTC

Uptime: **3 Minutes**
Since 2016-12-13 10:06:39 UTC

Environment: _default

Platforms: centos

FQDN: tomcatserver1.packt-tomcatserver.g8.internal.cloudapp.net

IP Address: 100.117.170.35

https://manage.chef.io/organizations/packt/dashboard

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Chef Manage – Mozilla Firefox | knife.rb (~/Desktop/chef/chef-rep... | user@localhost:~/Desktop/chef/c...

Chef Manage – Mozilla Firefox

Chef Manage | All resources - Micros...

https://manage.chef.io/organizations/packt/dashboard?endTime=1481623819&startTime=1481537

Search

CHEF MANAGE

Nodes | Reports | Policy | Administration

Feedback | Organization packt | Signed in as Video Packt | 0 | 0

- Dashboard
- Run History

Showing chef-client runs for **12/12/2016 - 12/13/2016**

Runs Summary

No Data Available.

Run Counts

success failure aborted

No Data Available.

Run Durations

success failure aborted

Chef Manage – Mozilla Firefox

Chef Manage | All resources - Micros...

https://manage.chef.io/organizations/packt/dashboard?endTime=1481623884&startTime=1481537

Search

CHEF MANAGE

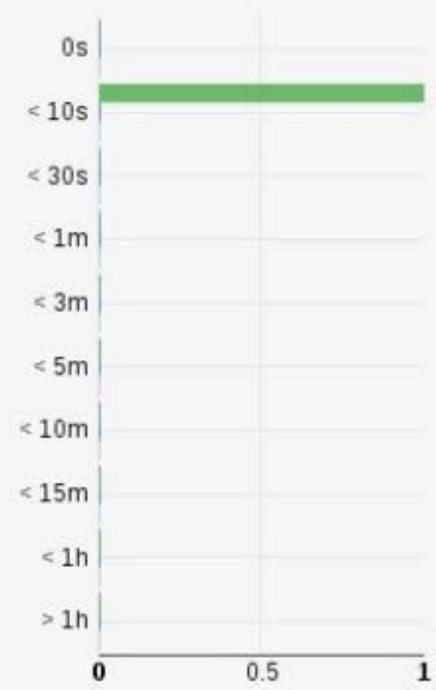
Nodes | Reports | Policy | Administration

Feedback | Organization packt | Signed in as Video Packt | 0 | 0

- Dashboard
- Run History

Run Durations

success failure aborted



No Data Available.

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Feedback What's New? About Chef Manage

Applications Places Firefox Web Browser Tue 15:42

Chef Manage – Mozilla Firefox

Chef Manage | All resources - Micros...

https://manage.chef.io/organizations/packt/dashboard?endTime=1481623884&startTime=1481537

Search

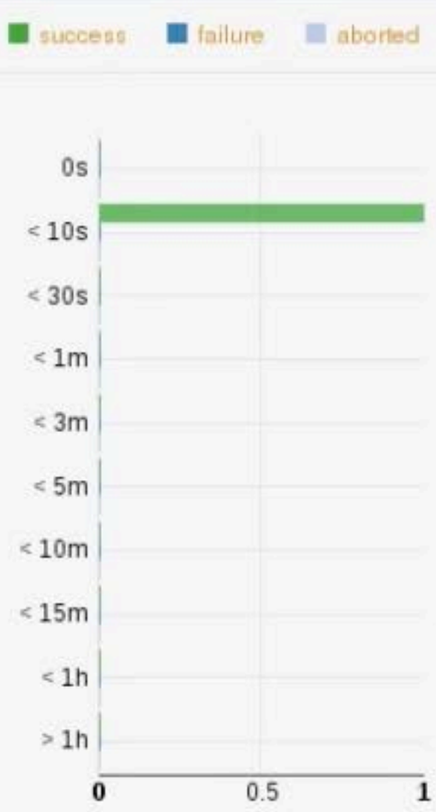
CHEF MANAGE

Nodes | Reports | Policy | Administration

Feedback | Organization packt | Signed in as Video Packt | 0 | 0

- Dashboard
- Run History

Run Durations



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Feedback What's New? About Chef Manage

Chef Manage - Mozilla Firefox | knife.rb (~/Desktop/chef/chef-rep... | user@localhost:~/Desktop/chef/c...

All resources – Microsoft Azure – Mozilla Firefox

Chef Manage | All resources - Micros...

https://portal.azure.com/#blade/HubsExtension/Resources/resourceType/Microsoft.Resources%2Fres

Search

Microsoft Azure All resources

videotesting@outlook...
VIDEOTESTINGOUTLOOK (DE...

All resources

videotestingoutlook (Default Directory)

Add Columns Refresh

Subscriptions: Free Trial

Filter by name...

4 items

NAME	TYPE	RESOURCE GROUP	LOCATION	SUBSCRIPTION
azeb87ff0ffa9atjafemtmaj	Storage account (classic)	Default-Storage-CentralUS	Central US	Free Trial
classicstorage11	Storage account	cloud	Central US	Free Trial
packt-tomcatserver	Cloud service (classic)	packt-tomcatserver	Central US	Free Trial
tomcatserver1	Virtual machine (classic)	packt-tomcatserver	Central US	Free Trial

Applications Places Firefox Web Browser Tue 15:42

All resources – Microsoft Azure – Mozilla Firefox

Chef Manage | All resources - Micros...

https://portal.azure.com/#resource/subscriptions/22e54e87-21de-4460-930c-8d1e9b10769f/resou

Search

Microsoft Azure All resources > Resource

videotesting@outlook...
VIDEOTESTINGOUTLOOK (DE...

All resources
videotestingoutlook (Default Directory)

Add Columns Refresh

Subscriptions: Free Trial

Filter by name...

4 items

NAME

azeb87ff0ffa9atjafemtmaj

classicstorage11

packt-tomcatserver

tomcatserver1

Resource

Search (Ctrl+/)

All resources - Microsoft Azure - ...

knife.rb (~/Desktop/chef/chef-rep...

user@localhost:~/Desktop/chef/c...

Packt>

4 / 4

Applications Places Firefox Web Browser Tue 15:43

Dashboard - Mozilla Firefox

Chef Manage | Dashboard

https://portal.azure.com/#

Search

Microsoft Azure

Search resources

videotesting@outlook...
VIDEOTESTINGOUTLOOK (DE...

New

All resources

Resource groups

App Services

SQL databases

SQL data warehouses

NoSQL (DocumentDB)

Virtual machines

Load balancers

Storage accounts

Virtual networks

Dashboard | New dashboard | Edit dashboard | Share | Fullscreen | Clone | Delete

All resources
ALL SUBSCRIPTIONS

tomcatserver1	Virtual machine (classic)
videotestingll	Cloud service (classic)
classicstorage11	Storage account
azeb87ff0ffa9atjafemtma	Storage account (classic)

Service health
MY RESOURCES

Get started

Virtual Machines
Provision Windows and Linux virtual machines in minutes

App Service
Create web and mobile apps for any platform and device

SQL Database
Managed relational database-as-a-service

Storage
Durable, highly available and massively scalable storage

Azure Portal
about how to use the Azure Portal

videotestingll
CLOUD SERVICE

Deleted

packt-tomcatserver
CLOUD SERVICE

Deleted

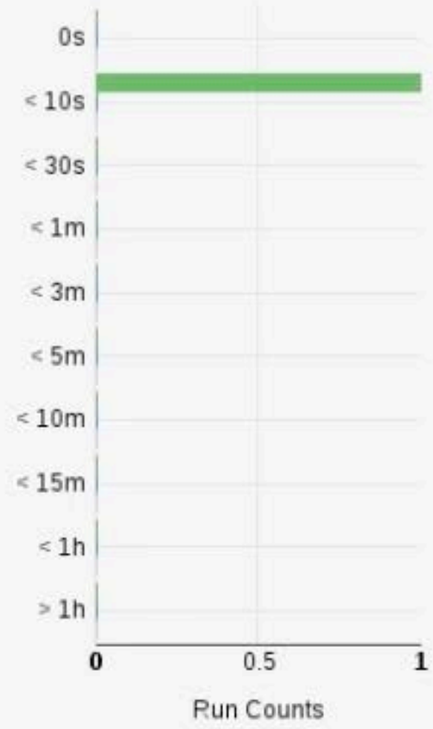
https://portal.azure.com/#blade/HubsExtension/Resources/resourceType/Microsoft.Compute/VirtualMachines

Dashboard - Mozilla Firefox | knife.rb (~/Desktop/chef/chef-rep... | user@localhost:~/Desktop/chef/c...

Packt>

Run Durations

success failure aborted



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Applications Places Firefox Web Browser Tue 16:18

tomcatserver1 – Microsoft Azure – Mozilla Firefox

Chef Manage | tomcatserver1 - Micr...

https://portal.azure.com/#resource/subscriptions/22e54e87-21de-4460-930c-8d1e9b10769f/resou

Search

Microsoft Azure All resources > tomcatserver1

videotesting@outlook...
VIDEOTESTINGOUTLOOK (DE...

All resources
videotestingoutlook (Default Directory)

Add Columns Refresh

Subscriptions: Free Trial

Filter by name...

4 items

NAME

- tomcatserver1 ...
- packt-tomcatserver ...
- classicstorage11 ...
- azeb87ff0ffa9atjafemtmaj ...

tomcatserver1
Virtual machine (classic)

Connect Start Restart Stop Capture ... More

22e54e87-21de-4460-930c-8d1e9b10769f

Search (Ctrl+/)

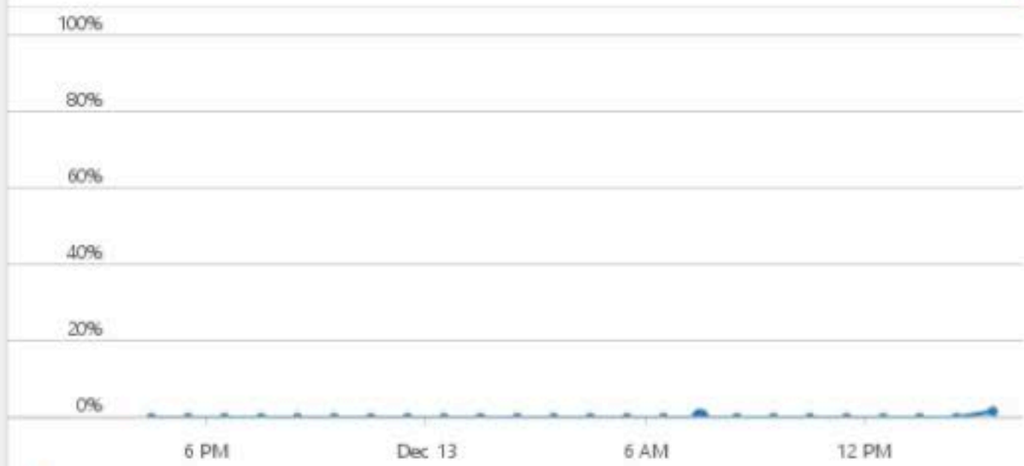
SETTINGS

- Disks
- Network security group
- IP addresses
- Endpoints
- Load balanced sets
- Availability set
- Extensions
- Size

Monitoring

CPU percentage today

Edit



CPU PERCENTAGE
0.07 %

tomcatserver1 - Microsoft Azure ... | knife.rb (~/Desktop/chef/chef-rep... | user@localhost:~/Desktop/chef/c...

Packt

Applications Places Firefox Web Browser Tue 16:19

tomcatserver1 – Microsoft Azure – Mozilla Firefox

Chef Manage | tomcatserver1 - Micr...

https://portal.azure.com/#resource/subscriptions/22e54e87-21de-4460-930c-8d1e9b10769f/resou

Search

Microsoft Azure All resources > tomcatserver1 - Extensions >

videotesting@outlook...
VIDEOTESTINGOUTLOOK (DE...

All resources
videotestingoutlook (Default Directory)

Add Columns Refresh

Subscriptions: Free Trial

Filter by name...

4 items

NAME

- tomcatserver1 ...
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- azeb87ff0ffa9atjafemtmaj ...

tomcatserver1 - Extensions
Virtual machine (classic)

Search (Ctrl+/)

SETTINGS

- Disks
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22e54e87-21de-4460-930c-8d1e9b10769f

Monitoring

CPU percentage today

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Next Video

Docker Containers

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