

## Prerequisites

- Visual Studio 2015 or Higher
- Enable IIS Locally  
Powershell >>  
Import-Module ServerManager  
install-windowsfeature web-server, web-webserver -IncludeAllSubFeature  
install-windowsfeature web-mgmt-tools
- Web Deploy 3.6 ([download](#))
- Aws CLI (Not Mandatory)
- Nuget ([download](#)) to path C:\temp
- AWS Access Keys (Not Mandatory)
- Git Cli ([download](#))
- Aws [Login](#) (Use AD Cred)

## BackUp IIS config

IIS Config Location : C:\Windows\System32\inetsrv\config

- Delete Default Web Site
- open IIS Manager
- Right click Sites node under your machine in the Connections tree on the left side and click Add Website
- Enter "Default Web Site" as a Site name
- Set Application pool back to DefaultAppPool!
- Set Physical path to %SystemDrive%\inetpub\wwwroot
- Leave Binding and everything else as is

## Lets Build & Package

- Clone [Source Code](#) to C:\src
- CMD(Administrator) >> `cd C:\src\sample-web-api`
- Restore packages `C:\temp\nuget.exe restore sample-web-api.sln
- Build & Package the solution (Select MsBuild Path)  
"C:\Program Files (x86)\MSBuild\14.0\Bin\MSBuild.exe" sample-web-api.sln /verbosity:minimal  
/p:outputPath="%cd%/build"  
/p:DeployOnBuild=True,AutoParameterizationWebConfigConnectionStrings="false",DeployIISAppPath="Default Web Site/"

## Deploy Web Package

- Deploy Local IIS  
"C:\Program Files (x86)\IIS\Microsoft Web Deploy V3\msdeploy" -verb:sync -  
source:package=%cd%/build/\_PublishedWebsites/sample-web-api\_Package/sample-web-api.zip -  
dest:auto

➤ Deploy To Local Folder

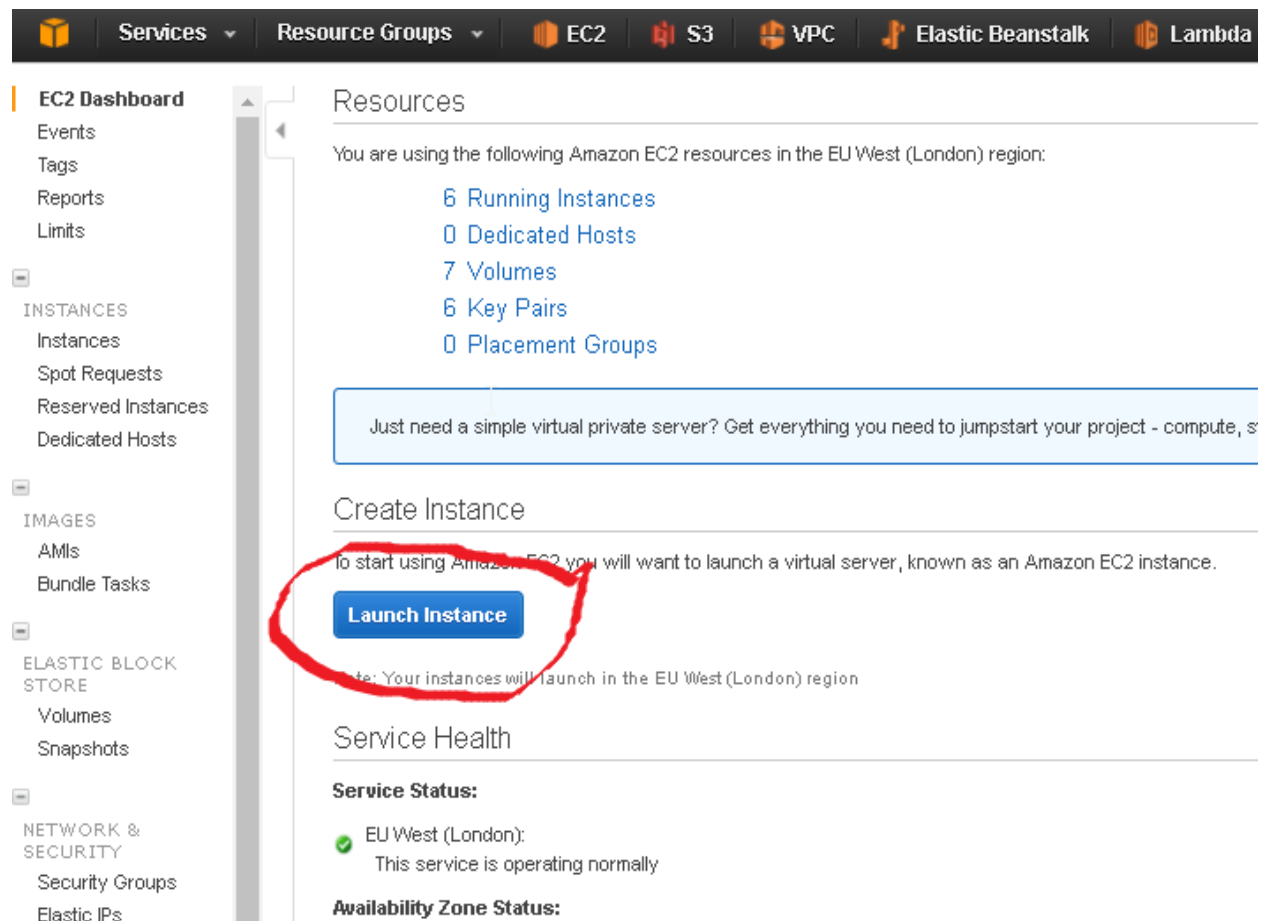
```
"C:\Program Files (x86)\IIS\Microsoft Web Deploy V3/msdeploy" -verb:sync -  
source:package=%cd%/build/_PublishedWebsites/sample-web-api_Package/sample-web-api.zip -  
dest:contentpath="C:\test_deployments\sample-web-api"
```

➤ Deploy To Remote IIS

```
"C:\Program Files (x86)\IIS\Microsoft Web Deploy V3/msdeploy" -verb:sync -  
source:package="%cd%/build/_PublishedWebsites/sample-web-api_Package/sample-web-api.zip" -  
dest:auto,computerName=https://10.132.43.174:8172/MsDeploy.axd,userName=".\\Administrator",pass  
word="password",authType=Basic -debug -verbose -allowUntrusted
```









## Lets Deploy To AWS EC2 Instance

Click on Launch EC2 Instance



The screenshot shows the AWS Management Console interface for the EC2 service. The top navigation bar includes links for Services, Resource Groups, EC2, S3, VPC, Elastic Beanstalk, and Lambda. The left sidebar contains a navigation menu with categories like EC2 Dashboard, INSTANCES, IMAGES, ELASTIC BLOCK STORE, and NETWORK & SECURITY. The main content area is titled 'Resources' and displays a summary of EC2 resources in the EU West (London) region: 6 Running Instances, 0 Dedicated Hosts, 7 Volumes, 6 Key Pairs, and 0 Placement Groups. Below this summary is a blue box with a message: 'Just need a simple virtual private server? Get everything you need to jumpstart your project - compute, s...'. The 'Create Instance' section follows, with a red circle highlighting the 'Launch Instance' button. Below the button, a note states: 'Note: Your instances will launch in the EU West (London) region'. The 'Service Health' section at the bottom shows the 'Service Status' for EU West (London) as 'This service is operating normally' and the 'Availability Zone Status'.

## Choose AMI

	<b>Microsoft Windows Server 2016 with SQL Server Express</b> - ami-b9e5f4dd
Windows	Microsoft Windows 2016 Datacenter edition, Microsoft SQL Server 2016 Express. [English] Root device type: ebs    Virtualization type: hvm
	<b>Microsoft Windows Server 2016 with SQL Server Web</b> - ami-71e5f415
Windows	Microsoft Windows 2016 Datacenter edition, Microsoft SQL Server 2016 Web. [English] Root device type: ebs    Virtualization type: hvm
	<b>Microsoft Windows Server 2016 with SQL Server Standard</b> - ami-b2e4f5d6
Windows	Microsoft Windows 2016 Datacenter edition, Microsoft SQL Server 2016 Standard. [English] Root device type: ebs    Virtualization type: hvm
	<b>Microsoft Windows Server 2012 R2 Base</b> - ami-fc8e9f98
Windows Free tier eligible	Microsoft Windows 2012 R2 Standard edition with 64-bit architecture. [English] Root device type: ebs    Virtualization type: hvm
	<b>Microsoft Windows Server 2012 R2 with SQL Server Express</b> - ami-3cb3a258
Windows	Microsoft Windows Server 2012 R2 Standard edition, 64-bit architecture, Microsoft SQL Server 2016 Express edition. [English] Root device type: ebs    Virtualization type: hvm
	<b>Microsoft Windows Server 2012 R2 with SQL Server Web</b> - ami-efb0a18b
Windows	Microsoft Windows Server 2012 R2 Standard edition, 64-bit architecture, Microsoft SQL Server 2016 Web edition. [English] Root device type: ebs    Virtualization type: hvm
	<b>Microsoft Windows Server 2012 R2 with SQL Server Standard</b> - ami-e88e9f8c
Windows	Microsoft Windows Server 2012 R2 Standard edition, 64-bit architecture, Microsoft SQL Server 2016 Standard edition. [English] Root device type: ebs    Virtualization type: hvm
	<b>Microsoft Windows Server 2012 R2 with SQL Server Express</b> - ami-a6b2a3c2

## Choose an Instance Type

### Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying computing needs.

Filter by: **All instance types** **Current generation** [Show/Hide Columns](#)

Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)				
	Family	Type	vCPUs	Memory (GiB)
<input type="checkbox"/>	General purpose	t2.nano	1	0.5
<input checked="" type="checkbox"/>	General purpose	t2.micro Free tier eligible	1	1
<input type="checkbox"/>	General purpose	t2.small	1	2
<input type="checkbox"/>	General purpose	t2.medium	2	4
<input type="checkbox"/>	General purpose	t2.large	2	8

## Configure Instance Details

### Step 3: Configure Instance Details

**No default VPC found.** Select another VPC, or [create a new default VPC](#).

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of lower prices, or launch on-demand instances.

<b>Number of instances</b> ⓘ	<input type="text" value="1"/>	<a href="#">Launch into Auto Scaling Group</a> ⓘ
<b>Purchasing option</b> ⓘ	<input type="checkbox"/> Request Spot instances	
<b>Network</b> ⓘ	<input type="text" value="vpc-4f5fd326   vpc.eu-west-2"/> <a href="#">Create new VPC</a> No default VPC found. <a href="#">Create a new default VPC</a> .	
<b>Subnet</b> ⓘ	<input type="text" value="subnet-348f3d4f   private.eu-west-2.az1   eu-west-2:2"/> <a href="#">Create new subnet</a> 4084 IP Addresses available	
<b>Auto-assign Public IP</b> ⓘ	<input type="text" value="Use subnet setting (Disable)"/>	
<b>IAM role</b> ⓘ	<input type="text" value="ec2InstanceRole"/> <a href="#">Create new IAM role</a>	
<b>Shutdown behavior</b> ⓘ	<input type="text" value="Stop"/>	
<b>Enable termination protection</b> ⓘ	<input type="checkbox"/> Protect against accidental termination	
<b>Monitoring</b> ⓘ	<input type="checkbox"/> Enable CloudWatch detailed monitoring <a href="#">Additional charges apply.</a>	
<b>Tenancy</b> ⓘ	<input type="text" value="Shared - Run a shared hardware instance"/> <a href="#">Additional charges will apply for dedicated tenancy.</a>	

Click on Advanced Details and add below powershell to the userdata select As text option

▼ Advanced Details

<b>User data</b> ⓘ	<input checked="" type="radio"/> As text <input type="radio"/> As file <input type="checkbox"/> Input is already base64 encoded
<pre>&lt;powershell&gt; Set-ExecutionPolicy Unrestricted -Force New-Item -ItemType directory -Path 'C:\temp'  # Install IIS and Web Management Tools</pre>	

```
<powershell>
```

```
Set-ExecutionPolicy Unrestricted -Force
```

```
New-Item -ItemType directory -Path 'C:\temp'
```

```
# Install IIS and Web Management Tools.
```

```
Import-Module ServerManager
```

```
install-windowsfeature web-server, web-webserver -IncludeAllSubFeature
```

```
install-windowsfeature web-mgmt-tools
```

```
# Download And Install WebDeploymentAgent
```

```
$url = "https://download.microsoft.com/download/0/1/D/01DC28EA-638C-4A22-A57B-4CEF97755C6C/WebDeploy_amd64_en-US.msi"
```

```
$output = "C:\temp\webdeploy_3.6.msi"
```

```
$start_time = Get-Date
```

```
$wc = New-Object System.Net.WebClient
```

```
$wc.DownloadFile($url, $output)
```

```
Write-Output "Time taken: $((Get-Date).Subtract($start_time).Seconds) second(s)"
```

```
msiexec /I $output ADDLOCAL=all /passive /norestart LicenseAccepted="0" /!*  
C:\temp\msDeployInstall.log
```

```
Start-Sleep -s 60
```

```
#Add To Domain
```

```
$svc_account = "directory.zuto.cloud\svc_domain_join"
```

```
$svc_pwd_secure = ConvertTo-SecureString "C5trNsulgQV0" -AsPlainText -Force
```

```
$creds = New-Object -typename System.Management.Automation.PSCredential -argumentlist  
($svc_account,$svc_pwd_secure)
```

```
Add-Computer -DomainName directory.zuto.cloud -Credential $creds -Restart
```

## Add Storage

### Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type <small>(i)</small>	Device <small>(i)</small>	Snapshot <small>(i)</small>	Size (GiB) <small>(i)</small>	Volume Type <small>(i)</small>	IOPS <small>(i)</small>	Throughput (MB/s) <small>(i)</small>	Delete on Termination <small>(i)</small>	Encrypted <small>(i)</small>
Root	/dev/sda1	snap-00380db11d6eb730d	30	General Purpose SSD (GP2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

Add New Volume

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

## Add Tags

### Step 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver.

A copy of a tag can be applied to volumes, instances or both.

Tags will be applied to all instances and volumes. [Learn more](#) about tagging your Amazon EC2 resources.

Key <small>(127 characters maximum)</small>	Value <small>(255 characters maximum)</small>
Name	your-surname-application-name
Application	application-name
Owner	developer-name
Environment	dev
<p>Add another tag <small>(Up to 50 tags maximum)</small></p>	

## Review Instance Launch

Security Groups : HTTP, rdp\_inbound, ms\_deploy are setup upfront manually

### Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can select an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group: ☐ Create a new security group

☒ Select an existing security group

Security Group ID	Name
<input type="checkbox"/> sg-4250052b	allow_udp_dns_and_ssh
<input type="checkbox"/> sg-0f142166	awseb-e-nsehtmtpt3-stack-AWSEBLoadBalancerSecurityGroup-EMD2E6OF8YST
<input type="checkbox"/> sg-5a2a1f33	awseb-e-nsehtmtpt3-stack-AWSEBSecurityGroup-1C05C6W1V8K8S
<input type="checkbox"/> sg-fd165594	default
<input checked="" type="checkbox"/> sg-391e2b50	HTTP
<input type="checkbox"/> sg-976257fe	launch-wizard-10
<input type="checkbox"/> sg-0bcc9262	launch-wizard-7
<input type="checkbox"/> sg-06e3ca6f	launch-wizard-8
<input checked="" type="checkbox"/> sg-8d192ce4	ms_deploy
<input type="checkbox"/> sg-1c371575	quick-create-1
<input type="checkbox"/> sg-f9faab90	rancher-security-group
<input type="checkbox"/> sg-55a3f23c	RancherOS - HVM-v1-0-3-AutogenByAWSMP-
<input checked="" type="checkbox"/> sg-e4ce9e8d	rdp_inbound
<input type="checkbox"/> sg-d2f0a0bb	ssh_inbound

[Cancel](#)

[Previous](#)

[Review and Launch](#)

[Next: Configure Security Group](#)



## Select a key pair

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. [Learn more about removing existing key pairs from a public AMI.](#)

Proceed without a key pair

☒ I acknowledge that I will not be able to connect to this instance unless I already know the password built into this AMI.

Cancel

Launch Instances

Wait for 10 mins

## Deploy To Ec2

### Via Command Line

```
"C:\Program Files (x86)\IIS\Microsoft Web Deploy V3\msdeploy" -verb:sync -
source:package="%cd%/build/_PublishedWebsites/sample-web-api_Package/sample-web-api.zip" -
dest:auto,computerName=https://10.132.43.174:8172/MsDeploy.axd,userName="zuto\deploy",passwo
rd="9k4KRUFOTwr",authType=Basic -debug -verbose -allowUntrusted
```

## Visual Studio

Publish

Profile

Connection

Settings

Preview

test

Publish method: Web Deploy

Server: 10.132.43.174

Site name: Default Web Site

User name: zuto\deploy

Password:

Save password

Destination URL: e.g. http://www.contoso.com

Validate Connection

< Prev

Next >

Publish

Close

## Verify App Status

← → ↺

10.132.43.174/api/status

Apps

Zuto

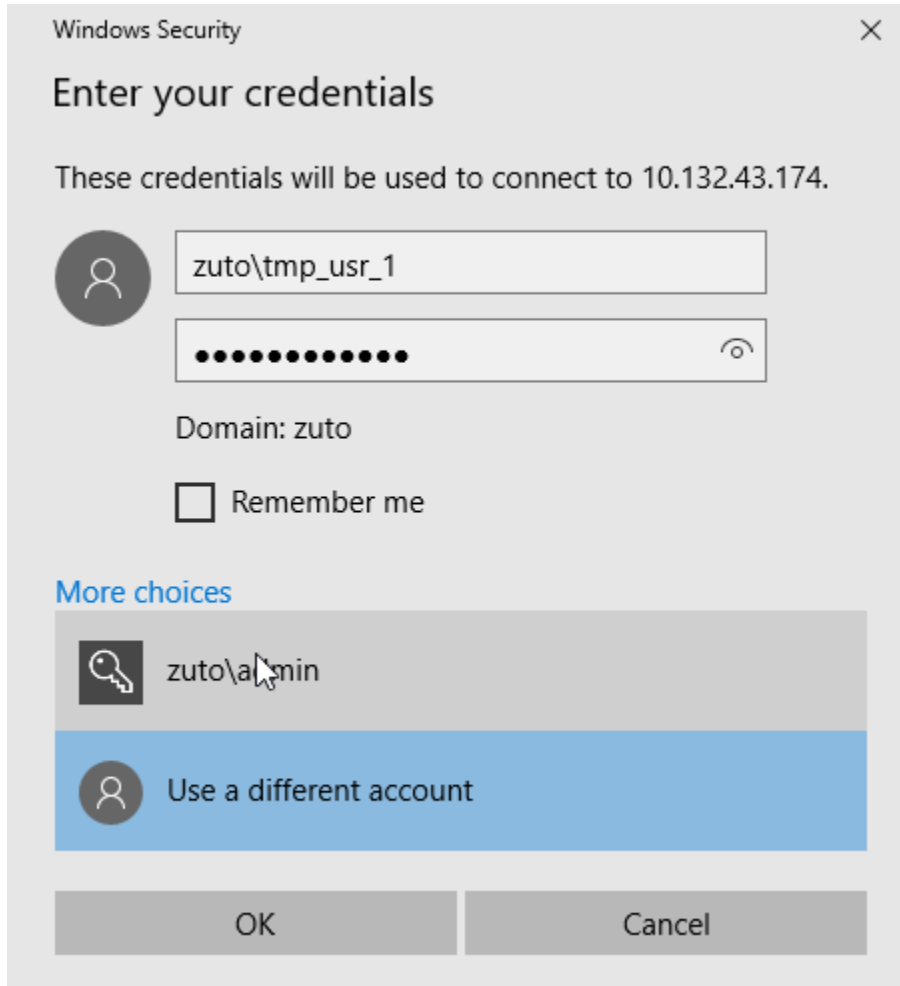
Company

LateroomsLiveWebsit

random

Woi


{"Status": "OK"}

**RDP Access**

Windows Security

## Enter your credentials


These credentials will be used to connect to 10.132.43.174.




Domain: zuto

☐ Remember me

[More choices](#)

 zuto\admin

 Use a different account

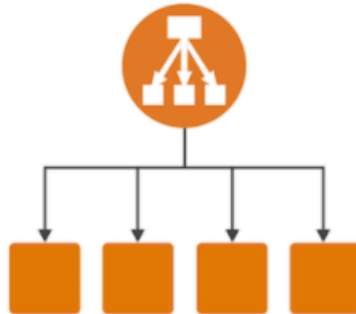
**Username : zuto\tmp\_usr\_1****Password: p1CpBV7rNCus**

# ELB

## Create ELB

re.

• Classic Load Balancer



A Classic Load Balancer makes routing decisions at either the transport layer (TCP/SSL) or the application layer (HTTP/HTTPS), and supports either EC2-Classic or a VPC.

## Step 1: Define Load Balancer

### Basic Configuration

This wizard will walk you through setting up a new load balancer. Begin by giving your new load balancer a unique name so that you can identify it you might create. You will also need to configure ports and protocols for your load balancer. Traffic from your clients can be routed from any load balancer to your EC2 instances. By default, we've configured your load balancer with a standard web server on port 80.

**Load Balancer name:**

**Create LB Inside:**  ▼

**Create an internal load balancer:** ☒ [\(what's this?\)](#)

**Enable advanced VPC configuration:** ☒

#### Listener Configuration:

Load Balancer Protocol	Load Balancer Port	Instance Protocol	Instance Port
HTTP ▼	<input type="text" value="80"/>	HTTP ▼	<input type="text" value="80"/>

Add

## Select Subnets

You will need to select a Subnet for each Availability Zone where you wish traffic to be routed by your load balancer. If you have instances in only one Availability Zone, please select at least two Subnets in different Availability Zones to provide higher availability for your load balancer.

VPC vpc-4f5fd326 (10.132.0.0/16) | vpc.eu-west-2

### Available subnets

Actions	Availability Zone	Subnet ID	Subnet CIDR	Name
	eu-west-2a	subnet-0f8d3f74	10.132.48.0/21	data.eu-west-2.az1
	eu-west-2a	subnet-4172c03a	10.132.0.0/20	public.eu-west-2.az1
	eu-west-2b	subnet-15cf0468	10.132.64.0/20	public.eu-west-2.az2
	eu-west-2b	subnet-1acf0467	10.132.112.0/21	data.eu-west-2.az2

### Selected subnets

Actions	Availability Zone	Subnet ID	Subnet CIDR	Name
	eu-west-2a	subnet-348f3d4f	10.132.32.0/20	private.eu-west-2.az1
	eu-west-2b	subnet-f2ce05bf	10.132.96.0/20	private.eu-west-2.az2

## Select Subnets

You will need to select a Subnet for each Availability Zone where you wish traffic to be routed by your load balancer. If you have instances in only one Availability Zone, please select at least two Subnets in different Availability Zones to provide higher availability for your load balancer.

VPC vpc-4f5fd326 (10.132.0.0/16) | vpc.eu-west-2

### Available subnets

Actions	Availability Zone	Subnet ID	Subnet CIDR	Name
	eu-west-2a	subnet-0f8d3f74	10.132.48.0/21	data.eu-west-2.az1
	eu-west-2a	subnet-4172c03a	10.132.0.0/20	public.eu-west-2.az1
	eu-west-2b	subnet-15cf0468	10.132.64.0/20	public.eu-west-2.az2
	eu-west-2b	subnet-1acf0467	10.132.112.0/21	data.eu-west-2.az2

### Selected subnets

Actions	Availability Zone	Subnet ID	Subnet CIDR	Name
	eu-west-2a	subnet-348f3d4f	10.132.32.0/20	private.eu-west-2.az1
	eu-west-2b	subnet-f2ce05bf	10.132.96.0/20	private.eu-west-2.az2

## Step 2: Assign Security Groups

You have selected the option of having your Elastic Load Balancer inside of a VPC, which allows you to assign security groups to your load balancer. Please select the s

Assign a security group: ☐ Create a new security group  
☒ Select an existing security group

Security	Name	Description
<input type="checkbox"/>	sg-4250052b allow_udp_dns_and_ssh	Allow UDP DNS traffic
<input type="checkbox"/>	sg-0f142166 awseb-e-nsehmtp3-stack-AWSEBLoadBalancerSecurityGroup-EMD2E6OF8YST	Load Balancer Security Group
<input type="checkbox"/>	sg-5a2a1f33 awseb-e-nsehmtp3-stack-AWSEBSecurityGroup-1C05C6W1V8K8S	VPC Security Group
<input type="checkbox"/>	sg-fd165594 default	default VPC security group
<input checked="" type="checkbox"/>	sg-391e2b50 HTTP	Ports Need To be open to access the web service
<input type="checkbox"/>	sg-07c0574c	

## Step 4: Configure Health Check

Your load balancer will automatically perform health checks on your EC2 instance:

<b>Ping Protocol</b>	<input type="text" value="HTTP"/>
<b>Ping Port</b>	<input type="text" value="80"/>
<b>Ping Path</b>	<input type="text" value="/api/status"/>

### Advanced Details

<b>Response Timeout</b>	<input type="text" value="5"/>	seconds
<b>Interval</b>	<input type="text" value="10"/>	seconds
<b>Unhealthy threshold</b>	<input type="text" value="2"/>	
<b>Healthy threshold</b>	<input type="text" value="3"/>	

## Step 5: Add EC2 Instances

The table below lists all your running EC2 Instances. Check the boxes in the Select column to add those instances to this load balancer.

VPC vpc-4f5fd326 (10.132.0.0/16) | vpc.eu-west-2

<input type="checkbox"/>	Instance	Name	State	Security groups
<input type="checkbox"/>	i-0458231...	RancherOS	stopped	rancher-security-group
<input type="checkbox"/>	i-035ac3ab...	KarlWorkshop Test-env	running	awseb-e-nsehtmtpt3-sta
<input checked="" type="checkbox"/>	i-0081a6d...	sri-test-pvt	running	ms_deploy, rdp_inbound
<input type="checkbox"/>	i-09345f65...	tableau-wdc-host	running	launch-wizard-7
<input type="checkbox"/>	i-0c3f9daf8...	dns-recursor.eu-west-2.az1	running	allow_udp_dns_and_ssh
<input type="checkbox"/>	i-019d0ece...	dns-recursor.eu-west-2.az2	running	allow_udp_dns_and_ssh
<input type="checkbox"/>	i-0c77a6ad...	Test-Server	running	launch-wizard-8

### Availability Zone Distribution

1 instance in eu-west-2a

- ☒ Enable Cross-Zone Load Balancing
- ☒ Enable Connection Draining  seconds

## Step 6: Add Tags

Apply tags to your resources to help organize and identify them.

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. [Learn more](#) about tagging your Amazon EC2 resources.

Key	Value
<input type="text" value="Name"/>	<input type="text" value="ssunkari-elb-sample-web-api"/>
<input type="text" value="Owner"/>	<input type="text" value="ssunkari"/>
<input type="button" value="Create Tag"/>	

## Verify

<input type="checkbox"/>	tableau-wdo-lb	tableau-wdo-lb-584528388....	vpc-4f5fd326	eu-west-2a	classic	August 15, 2017 at 11:46:11...
<input type="checkbox"/>	awseb-e-n-AWSEBLoa-1HN...	internal-awseb-e-n-AWSEBL...	vpc-4f5fd326	eu-west-2a, eu-west-2b	classic	August 21, 2017 at 3:13:43 ...
<input checked="" type="checkbox"/>	ssunkari-elb-sample-web-api	internal-ssunkari-elb-sample...	vpc-4f5fd326	eu-west-2a, eu-west-2b	classic	August 22, 2017 at 10:27:2...

Load balancer: **ssunkari-elb-sample-web-api**

Description **Instances** Health Check Listeners Monitoring Tags

Connection Draining: Enabled, 300 seconds [\(Edit\)](#)

[Edit Instances](#)

Instance ID	Name	Availability Zone	Status	Actions
i-0081a6d6a69465789	sri-test-pvt	eu-west-2a	InService ⓘ	<a href="#">Remove from Load Balancer</a>

← → ↺ ⓘ internal-ssunkari-elb-sample-web-api-2000354942.eu-west-2.elb.amazonaws.com/api/status

Apps Zuto Company LateroomsLiveWebsit random Work LateroomsTestWebsit \*

```
{"Status": "OK"}
```



# AMI

## Create AMI

<input checked="" type="checkbox"/>	sri-test-p	Connect	i-0081a6d6a69465789	t2.micro	eu
<input type="checkbox"/>	dns-recu	Get Windows Password	i-019d0ece5131d4...	t2.small	eu
<input type="checkbox"/>	KarlWor	Launch More Like This	i-035ac3ab74caeaefd	t2.small	eu
<input type="checkbox"/>	tableau-	Instance State	i-09345f6564539b4...	t2.small	eu
<input type="checkbox"/>	dns-recu	Instance Settings	i-0e2f04a69447a85f...	t2.small	eu
<input type="checkbox"/>	Test-Ser	Image	Create Image		eu
<input type="checkbox"/>	Rancher	Networking	Bundle Instance (instance store)		eu
<input type="checkbox"/>		CloudWatch Monitoring	i-0402b17108012...	t2.small	eu

Create Image

Instance ID

i-0081a6d6a69465789

Image name

ssunkari-sample-web-api-ami

Image description

Sample Web App AMI required for Launch Configurat

No reboot

☐

Instance Volumes

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encrypted
Root	/dev/sda1	snap-0352d2af96dc20c0d	30	General Purpose SSD (GP2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

Add New Volume

Total size of EBS Volumes: 30 GiB

When you create an EBS image, an EBS snapshot will also be created for each of the above volumes.

Cancel

Create Image

# ASG

## Create Auto Scaling Group

To create an Auto Scaling group, you will first need to choose a template that your Auto S a launch configuration or create a new one, and then apply it to your group.

Later, if you want to use a different template, you can create another launch configuration you can update the software that your group uses when it launches new instances.

- ☒ Create a new launch configuration
- ☐ Create an Auto Scaling group from an existing launch configuration

## Create Launch Configuration

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You

Quick Start

**My AMIs**


AWS Marketplace

Community AMIs

▼ Ownership

☒ Owned by me
 ☐ Shared with me

▼ Architecture


**ssunkari-sample-web-api-ami - ami-8f62720b**  
 Sample Web App AMI required for Launch Configuration  
 Root device type: ebs    Virtualization type: hvm    Owner: 813630055421

## Create Launch Configuration

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance types Current generation [Show/Hide Columns](#)

**Currently selected:** t2.micro (Variable ECU's, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

	Family	Type	vCPUs
<input type="checkbox"/>	General purpose	t2.nano	1
<input checked="" type="checkbox"/>	General purpose	t2.micro Free tier eligible	1

## Create Launch Configuration

**Name** ⓘ

**Purchasing option** ⓘ ☐ Request Spot Instances

**IAM role** ⓘ

**Monitoring** ⓘ ☐ Enable CloudWatch detailed monitoring  
[Learn more](#)

### Advanced Details

**Kernel ID** ⓘ

**RAM Disk ID** ⓘ

**User data** ⓘ ☒ As text ☐ As file ☐ Input is already base64 encoded

```
System.Management.Automation.PSCredential -argumentlist ($svc_account,$svc_pwd_secure)
Add-Computer -DomainName directory.zuto.cloud -Credential $creds -Restart
</powershell>
```

**IP Address Type** ⓘ ☐ Only assign a public IP address to instances launched in the default VPC and subnet. (default)  
☐ Assign a public IP address to every instance.  
☒ Do not assign a public IP address to any instances.

Note: this option only affects instances launched into an Amazon VPC

## Create Launch Configuration

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes.  
<https://docs.aws.amazon.com/console/ec2/launchinstance/storage> about storage options in Amazon EC2.

Volume Type ⓘ	Device ⓘ	Snapshot ⓘ	Size (GiB) ⓘ	Volume Type ⓘ	IOPS ⓘ	Throughput ⓘ	Delete on Termination ⓘ	Encrypted ⓘ
Root	/dev/sda1		30	General Purpose (SSD)	100 / 3000	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<button>Add New Volume</button>								

## Add HTTP,rdp\_inbound,ms\_deploy Security Groups

### Create Launch Configuration

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group: ☒ Create a **new** security group

☐ Select an **existing** security group

Security group name:

Description:

VPC:  [Create new VPC](#)

Type	Protocol	Port Range	Source
HTTP	TCP	80	Custom IP <input type="text" value="sg"/>

[Add Rule](#)

**No default VPC found**  
Select another VPC, or [contact AWS Support](#)

**Warning**  
You will not be able to connect to this instance unless you don't have port(s) 3389 open.

sg-4250052b - allow\_udp\_dns\_and\_ssh

sg-49c2f620 - awseb-e-fwcisfb8yf-stack-AWSEBLoadBalancerSecurityGroup-1I9HPGWTAV5QW

sg-48c2f621 - awseb-e-fwcisfb8yf-stack-AWSEBSecurityGroup-1DCZ8U08YB0NC

sg-0f142166 - awseb-e-nsehtnmtpt3-stack-AWSEBLoadBalancerSecurityGroup-EMD2E6OF8YST

sg-5a2a1f33 - awseb-e-nsehtnmtpt3-stack-AWSEBSecurityGroup-1C05C6W1V8K8S

sg-cac3f7a3 - awseb-e-qnpes5c53v7-stack-AWSEBLoadBalancerSecurityGroup-3MA5E4K62SKE

sg-02cdf96b - awseb-e-qnpes5c53v7-stack-AWSEBSecurityGroup-1D8E61BKVLKD3

sg-fd165594 - default

sg-391e2b50 - HTTP

### Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. [Learn more about removing existing key pairs from a public AMI.](#)

☒ I acknowledge that I will not be able to connect to this instance unless I already know the password built into this AMI.

[Cancel](#)

[Create launch configuration](#)

## Ignore the VPC Warnings

### Create Auto Scaling Group

[Cancel and Exit](#)


#### No default VPC found

Select another VPC, or [contact AWS Support](#) if you want to create a new default VPC.

[Don't show me this again](#)

**Launch Configuration** ⓘ ssunkari-sample-web-api-launch-config

**Group name** ⓘ ssunkari-sample-web-api-asg

**Group size** ⓘ Start with  instances

**Network** ⓘ vpc-4f5fd326 (10.132.0.0/16) | vpc.eu-west-2

 [Create new VPC](#)


**Subnet** ⓘ

- subnet-348f3d4f(10.132.32.0/20) | private.eu-west-2, az1 | eu-west-2a
- subnet-f2ce05bf(10.132.96.0/20) | private.eu-west-2, az2 | eu-west-2b

[Create new subnet](#)

No instances in this Auto Scaling group will be assigned a public IP address. ⓘ

#### Advanced Details

**Load Balancing** ⓘ ☒ Receive traffic from one or more load balancers  [Learn about Elastic Load Balancing](#)

**Classic Load Balancers** ⓘ ssunkari-elb-sample-web-api

**Target Groups** ⓘ Default

**Health Check Type** ⓘ ☒ ELB ☐ EC2

**Health Check Grace Period** ⓘ  seconds

**Monitoring** ⓘ Amazon EC2 Detailed Monitoring metrics, which are provided at 1 minute frequency, are not enabled for the launch configuration ssunkari-sample-web-api-launch-config. Instances launched from it will use Basic Monitoring metrics, provided at 5 minute frequency. [Learn more](#)

**Instance Protection** ⓘ

### Create Auto Scaling Group

You can optionally add scaling policies if you want to adjust the size (number of instances) making such adjustments in response to an Amazon CloudWatch alarm that you assign to it. instances or a percentage of the existing group size, or you can set the group to an exact size of your group accordingly. [Learn more](#) about scaling policies.

- ☒ Keep this group at its initial size
- ☐ Use scaling policies to adjust the capacity of this group



## Create Auto Scaling Group

A tag consists of a case sensitive key-value pair that you can use to identify your group. For example, you could define a tag with Key = Environment: Production. You can optionally choose to apply these tags to instances in the group when they launch. [Learn more](#).

Key	Value	Tag New Instances
Name	ssunkari-sample-web-api-asg	<input checked="" type="checkbox"/>

**Add tag** 49 remaining

## Verify

**Create Auto Scaling group**
**Actions**

Filter: 
1 to 3 of 3 Auto Scaling Groups

<input type="checkbox"/>	Name	Launch Configuration	Instances
<input checked="" type="checkbox"/>	ssunkari-sample-web-api-asg	ssunkari-sample-web-a...	1
<input type="checkbox"/>	awseb-e-fwcisfb8yf-stack-AWSEBAutoScalingGroup-OBZ49EOB56BO	awseb-e-fwcisfb8yf-stac...	1
<input type="checkbox"/>	awseb-e-nsehmtmpt3-stack-AWSEBAutoScalingGroup-194GM2GPP432U	awseb-e-nsehmtmpt3-st...	1

**Auto Scaling Group: ssunkari-sample-web-api-asg**

Details
Activity History
Scaling Policies
**Instances**
Monitoring
Notifications
Tags
Schedule

**Actions**

Filter: **Any Health Status** **Any Lifecycle State**

1 to 1 of 1 Instances

<input type="checkbox"/>	Instance ID	Lifecycle	Launch Configuration Name	Availability Zone	Health State
<input type="checkbox"/>	i-0f43a617d08074b27	InService	ssunkari-sample-web-api-launch-config	eu-west-2b	Healthy



## Add Scaling Policy

Details
Activity History
**Scaling Policies**
Instances
Monitoring
Notifica

Add policy

### Create Scaling policy

**Name:**

**Metric type:**

**Target value:**

**Instances need:**  seconds to warm up after scaling

**Disable scale-in:** ☐

[Create a simple scaling policy](#) ⓘ

[Create a scaling policy with steps](#) ⓘ

## Verify

Create Load Balancer
Actions

Filter: Search

Name	DNS name	State	VPC ID	Avail
tableau-wd-o-lb	tableau-wd-o-lb-584528388....		vp-o-4f5fd326	eu-wk
awseb-e-n-AWSEBLoa-1HNP6RMWDMHRL	internal-awseb-e-n-AWSEBL...		vp-o-4f5fd326	eu-wk
<b>ssunkari-elb-sample-web-api</b>	<b>internal-ssunkari-elb-sample-...</b>		<b>vp-o-4f5fd326</b>	<b>eu-wk</b>
awseb-e-f-AWSEBLoa-1ELRJ6SCFKN4F	internal-awseb-e-f-AWSEBL...		vp-o-4f5fd326	eu-wk
awseb-e-m-AWSEBLoa-JBH0GLHICFPG	internal-awseb-e-m-AWSEB...		vp-o-4f5fd326	eu-wk

Load balancer: **ssunkari-elb-sample-web-api**

Description
**Instances**
Health Check
Listeners
Monitoring
Tags

Connection Draining: Enabled, 300 seconds [\(Edit\)](#)

Edit Instances

Instance ID	Name	Availability Zone	Status	Actions
i-0081a6d6a69465789	sri-test-pvt	eu-west-2a	InService ⓘ	<a href="#">Remove from Load Balancer</a>
i-0f43a617d08074b27	ssunkari-sample-web-api-asg	eu-west-2b	InService ⓘ	<a href="#">Remove from Load Balancer</a>