

# **Ortus Cloud Servers**

# Welcome To The Cloud

Welcome to the repository of documentation for the [Ortus Solutions' cloud servers](#) that you can use to deploy ColdFusion (CFML), CommandBox and ContentBox hardened servers to many cloud providers like: AWS, Google Cloud, Azure and Digital Ocean.



## Intro

# Overview

This book is born out of a need to keep introducing our customers to new and innovative products. There are just too many folks who want to be in the Cloud but have no idea of how to get there. This guide is intended to be a journal on how to move your products to the ANY cloud using any of the supported providers.

## Supported Providers

- Amazon Web Services (AWS)
- Digital Ocean ( Coming soon )
- Google Cloud ( Coming soon )
- Azure Cloud ( Coming soon )

## Cloud Servers

Here is a listing of the cloud servers that are available now or in progress of being built.

Server	Providers	Status
Lucee+Nginx+Ubuntu	AWS	✓
Lucee+IIS+Windows	AWS	In Progress
ContentBox CMS+Nginx+Ubuntu+MySQL	AWS	In Progress
ContentBox CMS+Nginx+Ubuntu	AWS	In Progress



All of our cloud servers come pre-installed with the latest CommandBox CLI

# About this Book

The source code for this book is hosted in GitHub: <https://github.com/ortus-docs/cloud-servers>. You can freely contribute to it and submit pull requests. The contents of this book is copyright by [Ortus Solutions, Corp](#) and cannot be altered or reproduced without author's consent. All content is provided "As-is" and can be freely distributed.

- The majority of code examples in this book are done in `cfscript` .
- The majority of code generation and running of examples are done via **CommandBox**: The ColdFusion (CFML) CLI, Package Manager, REPL - <http://www.ortussolutions.com/products/commandbox>
- All ColdFusion examples designed to run on the open source Lucee Platform or Adobe ColdFusion 2016+

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## Contributing

We highly encourage contribution to this book and our open source software. The source code for this book can be found in our GitHub repository where you can submit pull requests: <https://github.com/ortus-docs/cloud-servers>.

## Charitable Proceeds

10% of the proceeds of using our cloud images will go to charity to support orphaned kids in El Salvador - <https://www.harvesting.org/>.

## Shalom Children's Home



Shalom Children's Home (<https://www.harvesting.org/>) is one of the ministries that is dear to our hearts located in El Salvador. During the 12 year civil war that ended in 1990, many children were left orphaned or abandoned by parents who fled El Salvador. The Benners saw the need to help these children and received 13 children in 1982. Little by little, more children came on their own, churches and the government brought children to them for care, and the Shalom Children's Home was founded.

Shalom now cares for over 80 children in El Salvador, from newborns to 18 years old. They receive shelter, clothing, food, medical care, education and life skills training in a Christian

environment. The home is supported by a child sponsorship program.

We have personally supported Shalom for over 6 years now; it is a place of blessing for many children in El Salvador that either have no families or have been abandoned. This is good earth to seed and plant.

# Author

## George Murphy

George Murphy is a Software Engineer who has a long history in the IT and television industry. He has traveled extensively and has many benefits and experiences from doing this. One of those benefits was being able to meet his wife while on a business trip to Hungary. George lives about 20 miles outside of the Washington DC area with his wife Erzsebet and daughter Virag.

He is a highly accomplished senior-level Software Design Engineer with extensive project leadership and solution design experience, successfully managing people, processes, and technology to implement critical enterprise solutions on time. Adept at learning and using new technologies and integrating them into corporate applications. Skilled team leader and mentor with excellent communication skills; can design and support Cloud and on premises applications for clients in diverse industries. Working in the cloud has become such a huge passion for him. Along with that passion has come a never ending thirst to learn new technologies such as Terraform, Nomad, and Vault.

George, would rather spend time fishing with his free time than anything else. He also loves to spend time with family and travel. He loves mentoring others in new technology. His mission is to share with other his acceptance of Jesus as his personal savior.

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## Luis Fernando Majano Lainez

Luis Majano is a Computer Engineer that has been developing and designing software systems since the year 2000. He was born in [San Salvador, El Salvador](#) in the late 70's, during a period of economical instability and civil war. He lived in El Salvador until 1995 and then moved to Miami, Florida where he completed his Bachelors of Science in Computer Engineering at [Florida International University](#). Luis resides in Houston, Texas with his beautiful wife Veronica, baby girl Alexia and baby boy Lucas!

He is the CEO of [Ortus Solutions](#), a consulting firm specializing in web development, ColdFusion (CFML), Java development and all open source professional services under the



ColdBox and ContentBox stack. He is the creator of ColdBox, ContentBox, WireBox, MockBox, LogBox and anything “BOX”, and contributes to many open source ColdFusion/Java projects. You can read his blog at [www.luismajano.com](http://www.luismajano.com)

Luis has a passion for Jesus, tennis, golf, volleyball and anything electronic. Random Author Facts:

- He played volleyball in the Salvadorean National Team at the tender age of 17
- The Lord of the Rings and The Hobbit is something he reads every 5 years. (Geek!)
- His first ever computer was a Texas Instrument TI-86 that his parents gave him in 1986. After some time digesting his very first BASIC book, he had written his own tic-tac-toe game at the age of 9. (Extra geek!)
- He has a geek love for circuits, microcontrollers and overall embedded systems.
- He has of late (during old age) become a fan of organic gardening.

Keep Jesus number one in your life and in your heart. I did and it changed my life from desolation, defeat and failure to an abundant life full of love, thankfulness, joy and overwhelming peace. As this world breathes failure and fear upon any life, Jesus brings power, love and a sound mind to everybody!

“Trust in the LORD with all your heart, and do not lean on your own understanding.”  
Proverbs 3:5

# EULA

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**Lucee, Mod\_cfml, and Nginx are companies NOT associated with Ortus Solutions.**

**AWS**

# Overview

In this section you will find all the server images we have created so you can run on AWS as either EC2 instances or ECS Containers.

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## EC2 Instance

What is an ec2 instance? It is simply a virtual machine running in the AWS (Amazon Web Services) cloud. EC2 stands for Elastic Compute Cloud. An on-demand ec2 instance is a virtual machine that a user can rent by the minute, hour or annually, which ever his use need may dictate. Ortus Solutions has seen a long need to bring Lucee servers to the AWS cloud. What are it's benefits? You can have a site up and running in minutes without going through configuration hell. There are many people still running legacy applications who see a need to upgrade for security purposes or modernization reasons. It just makes since to remove your servers from on premises providers and move to the cloud. If you want customization on the AMI image we can help you.

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/concepts.html>

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## Setup Your AWS Account

Going forward we will show you how to create an AWS ec2 web site using our Ortus hardened AMI's even if you have never done this before. The first thing you will need to do is setup an [AWS account](<https://aws.amazon.com/premiumsupport/knowledge-center/create-and-activate-aws-account/>) if you do not have one.

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## AWS Marketplace

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aws marketplace

ortus lucee

Hello, ortus-aws

Categories ▾ Delivery Methods ▾ Solutions ▾ Migration Mapping Assistant Your Saved List Partners Sell in AWS Marketplace Amazon Web Services Home Help

Developer Challenge: ML Powered Solutions

prizes. <

ENTRY: APRIL 15, 2020 | 2 PM PT

REAL-TIME VISIBILITY AND PROTECTION IN THE CLOUD

Cloud-native protection for your Amazon EC2 Instances

GET STARTED

AWS Marketplace is a digital catalog with thousands of software listings from independent software vendors that make it easy to find, test, buy, and deploy software that runs on AWS.

View all products

Find AWS Marketplace products that meet your needs.

Categories ▾ Vendors ▾ Pricing Plans ▾ Delivery Methods ▾

All categories ▾ All vendors ▾ All pricing plans ▾ All delivery methods ▾

Total results: 8200

Clear selection View results

Popular Categories

Operating Systems Security Networking Storage

Data Analytics Dev Ops Machine Learning Data Products

View all categories

The AWS marketplace is the place to find the Ortus Lucee CFML engine (Ubuntu Server 18.04 LTS) AMI (Amazon Machine Image). You have a choice of a multitude of different sizes and use agreements. This includes from the free tier to the high performance paid tier. If you already have an Amazon account go login and go the Amazon Marketplace at this URL <https://aws.amazon.com/marketplace/> Once on this URL search for Ortus. From there click the subscribe button off to the right.



# Ubuntu Based Images

Create an ec2 instance from an Ortus Lucee CFML engine (Ubuntu Server 18.04 LTS) AMI (Amazon Machine Image). We have created several based Ubuntu based images.

Images	Status
Lucee + Nginx	✓
CommandBox + Nginx	

## Lucee Versions

We will be creating images that support different Lucee Versions. Please note that you can update and patch each instance as you see fit as well.

Lucee Version	Status
5.3.2.9	✓
5.3.5+92	In Progress

# Lucee + Nginx

This AMI image will create a running Lucee site for you. If you do not want a ColdBox site we will show you how to remove it and have your own site. The first step is to have an AWS account. If you do not have one go to this URL to learn how to create an [AWS account.](<https://aws.amazon.com/premiumsupport/knowledge-center/create-and-activate-aws-account/>)

- Choose the AWS AMI. Go to this URL and do a search for Ortus at the top of the screen <https://aws.amazon.com/marketplace/>
- Click the **continue** to subscribe button
- Click the **accept terms** button
- Next go to this page and click launch new instance <https://console.aws.amazon.com/marketplace/home?#/subscriptions>
- This will take you to the "Choose an Instance Type." The default instance and AWS free tier selected is t3.micro. Unless you need more resources keep it at this. Go to the bottom of the screen and select Next: **Configure Instance Details** .

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 combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of 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 ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes

## Choose an Instance Type

- You are on the "Configure Instance Details" page and keep the defaults. Go to bottom of the page and click "Next: Add Storage" button.

aws Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of instances 1 Launch into Auto Scaling Group

Purchasing option ☐ Request Spot instances

Network vpc-b1ea5acb (default) Create new VPC

Subnet No preference (default subnet in any Availability Zone) Create new subnet

Auto-assign Public IP Use subnet setting (Enable)

Placement group ☐ Add instance to placement group

Capacity Reservation Open Create new Capacity Reservation

IAM role None Create new IAM role

Shutdown behavior Stop

Stop - Hibernate behavior ☐ Enable hibernation as an additional stop behavior

Enable termination protection ☐ Protect against accidental termination

Monitoring ☐ Enable CloudWatch detailed monitoring  
Additional charges apply.

Tenancy Shared - Run a shared hardware instance  
Additional charges will apply for dedicated tenancy.

Elastic Inference ☐ Add an Elastic Inference accelerator  
Additional charges apply.

T2/T3 Unlimited ☐ Enable  
Additional charges may apply

Cancel Previous Review and Launch Next: Add Storage

## Configure Instance Details

- You are now on the "Add Storage" page. Keep the defaults and click the button at the bottom right "Next: Add Tags."

aws Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### 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	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/sda1	snap-08424d04cc6cb92d6	8	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 Storage

- You are now on the "Add Tags" page. Let's add a tag. Click the add Tag. The y should be Key=Name and Value=Ortus Lucee CFML engine 5.2.9.31 (Ubuntu Server 18.04 LTS). Next go to the bottom of the page and click the button that says "Next: Configure Security Group."

**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	Value	Instances	Volumes
(128 characters maximum)	(256 characters maximum)		

*This resource currently has no tags*

Choose the [Add tag](#) button or [click to add a Name tag](#).  
Make sure your [IAM policy](#) includes permissions to create tags.

[Add Tag](#) (Up to 50 tags maximum)

## Add Tags

- You are on the "Configure Security Group" page. We need to make a couple of changes before leaving this page. First is to go to the source column and select **MyIP** so that ssh will only be enabled for your IP address (**VERY IMPORTANT**).
- Next click the "Add Rule" button and under the type column select **http** and leave port 80 selected. Go to the bottom right of the page and select and click the "Review and Launch" button.

**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 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:

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	My IP	e.g. SSH for Admin Desktop
HTTP	TCP	80	Custom 0.0.0.0/0, ::0	e.g. SSH for Admin Desktop

[Add Rule](#)

## Configure Security Group

- You are on the "Review Launch Instance" page. Review it and once you are okay click the "Launch" button on the bottom right of page.

aws

Services

Resource Groups

N. Virginia

Support

1. Choose AMI

2. Choose Instance Type

3. Configure Instance

4. Add Storage

5. Add Tags

6. Configure Security Group

7. Review

### Step 7: Review Instance Launch

Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

AMI Details

ortus-lucee-server-1583763038 - ami-00c3ff5c9f6bc3092

Root Device Type: ebs    Virtualization type: hvm

Edit AMI

Instance Type

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

Edit instance type

Security Groups

Security group name

launch-wizard-7

Description

launch-wizard-7 created 2020-03-15T16:31:45.811-04:00

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	Description ⓘ
SSH	TCP	22		
HTTP	TCP	80	0.0.0.0/0	
HTTP	TCP	80	:::0	

Edit security groups

Instance Details

Edit instance details

Storage

Edit storage

Tags

Edit tags

Cancel

Previous

Launch

## Review Instance Launch

- This opens a module window that is prompting you to suggesting an existing key pair or create a new open. If you do not know what this means I suggest you create a new key pair and put it in a folder that you have access to. If all went well you will see a green colored headline that says "Your instances are now launching."

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](#).

Choose an existing key pair

▼

Select a key pair

dbg-dbg

▼

☒ I acknowledge that I have access to the selected private key file (dbg-dbg.pem), and that without this file, I won't be able to log into my instance.

Cancel

Launch Instances

## Select Key Pair

- You are on the "Launch Status" page. Go to the bottom right and click the button labeled "View Instances."

The screenshot shows the AWS Management Console interface. At the top is the navigation bar with the AWS logo, 'Services', 'Resource Groups', a search icon, a notification bell, a user profile, and the region 'N. Virginia' with a 'Support' link. The main heading is 'Launch Status'. Below this is a green success message: 'Your instances are now launching' with a checkmark icon. It states 'The following instance launches have been initiated: i-05bc91b22a1e2b527' and includes a 'View launch log' link. Below that is a blue informational message: 'Get notified of estimated charges' with an 'i' icon. It says 'Create billing alerts to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier)'. A section titled 'How to connect to your instances' follows, explaining that instances are launching and will be in the 'running' state. It provides instructions on how to monitor and connect to instances. Below this is a section 'Here are some helpful resources to get you started' with links to 'How to connect to your Linux instance', 'Learn about AWS Free Usage Tier', 'Amazon EC2: User Guide', and 'Amazon EC2: Discussion Forum'. A section 'While your instances are launching you can also' lists links for 'Create status check alarms', 'Create and attach additional EBS volumes', and 'Manage security groups'. At the bottom right is a blue button labeled 'View Instances'.

## Launch Status

- Select your running instance. This will open some tabs at the bottom of the page. Select the "Description" tab. Look to the right on the description tab and look for "Public DNS (IPv4)." To the right of this text is the dns name. Copy that name and paste it in a browser. It should look something like this.
- `ec2-{public_dns}.compute-1.amazonaws.com`
- Paste that URL in a browser and you should see the default ColdBox site.

aws

Services

Resource Groups

New EC2 Experience

Tell us what you think

Launch Instance

Connect

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IMAGES

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ELASTIC BLOCK STORE

Volumes

Snapshots

Lifecycle Manager

NETWORK & SECURITY

Security Groups

Elastic IP

Launch Instance

Connect

Actions

Filter by tags and attributes or search by keyword

1 to 2 of 2

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6 IPs	Key Name
DBG Lucee ...	i-05bc91b22a1e2b527	t2.micro	us-east-1c	running	Initializing	None	ec2-3-94-76-218.comp...	3.94.76.218	-	dbg-dbg
Ortus Lucee ...	i-0f199a12e6c1000f6	t2.micro	us-east-1a	terminated		None	-	-	-	dbg-dbg

Instance: i-05bc91b22a1e2b527 (DBG Lucee Server)

Public DNS: ec2-3-94-76-218.compute-1.amazonaws.com

Description

Status Checks

Monitoring

Tags

Instance ID

Instance state

Instance type

Finding

Private DNS

Private IPs

Secondary private IPs

VPC ID

Subnet ID

Network interfaces

Source/dest. check

T2/T3 Unlimited

EBS-optimized

Root device type

Root device

Block devices

Elastic Graphics ID

i-05bc91b22a1e2b527

running

t2.micro

Opt-in to AWS Compute Optimizer for recommendations. [Learn more](#)

ip-172-31-41-33.ec2.internal

172.31.41.33

vpc-b1ea5acb

subnet-ed5637b1

eth0

True

Disabled

False

ebs

/dev/sda1

/dev/sda1

-

Public DNS (IPv4)

IPv4 Public IP

IPv6 IPs

Elastic IPs

Availability zone

Security groups

Scheduled events

AMI ID

Platform

IAM role

Key pair name

Owner

Launch time

Termination protection

Lifecycle

Monitoring

Alarm status

ec2-3-94-76-218.compute-1.amazonaws.com

3.94.76.218

-

-

us-east-1c

launch-wizard-7, [view inbound rules](#), [view outbound rules](#)

No scheduled events

ortus-lucee-server-1583763038 (ami-00c3ff5c9f6bc3092)

-

-

dbg-dbg

891096967466

March 15, 2020 at 4:35:14 PM UTC-4 (less than one hour)

False

normal

basic

None

Enjoy your servers!

# Managing your web site

Now that you have a site running in the cloud you will want to customize it. Remember that SSH pem file you downloaded. That is going to allow you to go on the server and edit files. If you are on a windows platform like me. Here are some tools I strongly suggest that you get locally.

1. CommandBox. This tool will allow you to make files and remove them locally. If you so decide that you want to edit and add files directly on the EC2 instance this can be done using the default instance of CommandBox on the server.  
<https://commandbox.ortusbooks.com/>
2. VSCode the editor of choice, and the reason I say that is because it has so many useful extensions. <https://code.visualstudio.com/download>
3. WinSCP the default file manager tool for Windows. <https://winscp.net/eng/index.php>

If you are using the Windows Package Manager [Chocolatey](#) you can download all of these from there.

Here is a script to download them in powershell. Save the script as anything.ps1.

Remember where you saved it. With PowerShell, you must make sure [Get-ExecutionPolicy](#) is not Restricted. We suggest using `Bypass` to bypass the policy to get things installed or `AllSigned` for quite a bit more security.

- Run `Get-ExecutionPolicy` . If it returns `Restricted` , then run  
`Set-ExecutionPolicy AllSigned` Or `Set-ExecutionPolicy Bypass -Scope Process` .

Go to the right corner of the dialog box below and copy this script and save it naming it whatever you like as long as the extension ends as \*.ps1

```
1 #Install Chocolatey
2 Set-ExecutionPolicy Bypass -Scope Process -Force; [System.Net.ServicePoint
3
4 #Assign Packages to Install
5 $Packages = 'commandbox',`
6             'vscode',`
7             'winscp'
8
9 #Install Packages
```



```
10 ForEach ($PackageName in $Packages)
11 {choco install $PackageName -y}
```

```
PS> .\anything.ps1 (enter)
```

If your scripts successfully installed you should see a new desktop icon for VSCode. If you open a shell ( cmd, powershell, git bash ) and type box you should see that Commandbox is installed.

# Connecting to your server

This page will walk you through connecting to your new server using the popular free software program WinSCP. I have a script for you to download on step 11 "[Managing your web site](#)" page. We will also take a look at an exciting VSCode extension called [Remote Development](#). It allows you to ssh directly to the EC2 instance and map the remote folder in your local VSCode IDE.

# Changelog

## Version 1.0.0\_5.2.3.9

- Initial Release

# CommandBox + Nginx

Coming Soon...

# Windows Based Images

Create an ec2 instance from an Ortus Lucee CFML engine (Windows Server 2019) AMI (Amazon Machine Image). We have created several based Windows-based images.

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## Lucee Versions

We will be creating images that support different Lucee Versions. Please note that you can update and patch each instance as you see fit as well.

# Lucee + IIS-Boncode

This AMI image will create a running Lucee Windows site for you. If you do not want a ColdBox site we will show you how to remove it and have your own site. The first step is to have an AWS account. If you do not have one go to this URL to learn how to create an [AWS account.](<https://aws.amazon.com/premiumsupport/knowledge-center/create-and-activate-aws-account/>)

- Choose the AWS AMI. Go to this URL and do a search for Ortus at the top of the screen <https://aws.amazon.com/marketplace/>
- Click the **continue** to subscribe button
- Click the **accept terms** button
- Next go to this page and click launch new instance <https://console.aws.amazon.com/marketplace/home?#/subscriptions>
- This will take you to the "Choose an Instance Type." The default instance and AWS free tier selected is t3.micro. Unless you need more resources keep it at this. Go to the bottom of the screen and select Next: `Configure Instance Details` .

**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 combinations of CPU, memory, storage, appropriate mix of 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.medium (Variable ECUs, 2 vCPUs, 2.3 GHz, Intel Broadwell E5-2686v4, 4 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available
<input type="checkbox"/>	General purpose	t2.nano	1	0.5	EBS only	-
<input type="checkbox"/>	General purpose	t2.micro <b>Free tier eligible</b>	1	1	EBS only	-
<input type="checkbox"/>	General purpose	t2.small	1	2	EBS only	-
<input checked="" type="checkbox"/>	General purpose	t2.medium	2	4	EBS only	-
<input type="checkbox"/>	General purpose	t2.large	2	8	EBS only	-

aws Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

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<input checked="" type="checkbox"/>	General purpose	t2.medium	2	4	EBS only	-
<input type="checkbox"/>	General purpose	t2.large	2	8	EBS only	-

- You are on the "Configure Instance Details" page and keep the defaults. Go to the bottom of the page and click the "Next: Add Storage" button.
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aws Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

## Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of instances: 1 Launch into Auto Scaling Group

Purchasing option: ☐ Request Spot instances

Network: vpc-ec112396 (default) Create new VPC

Subnet: No preference (default subnet in any Availability Zone) Create new subnet

Auto-assign Public IP: Use subnet setting (Enable)

Placement group: ☐ Add instance to placement group

Capacity Reservation: Open Create new Capacity Reservation

Domain join directory: No directory Create new directory

IAM role: None Create new IAM role

Shutdown behavior: Stop

Stop - Hibernate behavior: ☐ Enable hibernation as an additional stop behavior

Enable termination protection: ☐ Protect against accidental termination

Monitoring: ☐ Enable CloudWatch detailed monitoring Additional charges apply.

Tenancy: Shared - Run a shared hardware instance Additional charges may apply when launching Dedicated instances.

Cancel Previous Review and Launch Next: Add Storage

- You are now on the "Add Storage" page. Keep the defaults and click the button at the bottom right "Next: Add Tags."

**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	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/sda1	snap-031e1dc27d3ee8c1d	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.

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Add Tags](#)

- You are now on the "Add Tags" page. Let's add a tag. Click the add Tag. The y should be Key=Name and Value=Ortus Lucee CFML engine 5.3.6.61 (Windows Server 2019). Next go to the bottom of the page and click the button that says "Next: Configure Security Group."

**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	Value	Instances	Volumes
Name	Ortus Lucee CFML engine 5.3.6.61 (Windows Server 2019)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

[Add another tag](#) (Up to 50 tags maximum)

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Configure Security Group](#)

- You are on the "Configure Security Group" page. We need to make a couple of changes before leaving this page. First is to go to the source column and select **MyIP** so that ssh will only be enabled for your IP address (**VERY IMPORTANT**).
- Next click the "Add Rule" button and under the type column select **http** and leave port 80 selected. Go to the bottom right of the page and select and click the "Review and Launch" button.



**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 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:**

Type	Protocol	Port Range	Source	Description
RDP	TCP	3389	My IP	e.g. SSH for Admin Desktop
HTTP	TCP	80	Custom 0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop

[Add Rule](#)

[Cancel](#) [Previous](#) [Review and Launch](#)

- You are on the "Review Launch Instance" page. Review it and once you are okay click the "Launch" button on the bottom right of page.

**Step 7: Review Instance Launch**

Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

**⚠ Your instance configuration is not eligible for the free usage tier**

To launch an instance that's eligible for the free usage tier, check your AMI selection, instance type, configuration options, or storage devices. [Learn more about free usage tier](#) eligibility and usage restrictions.

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

**AMI Details** [Edit AMI](#)

**ortus-lucee-server-windows-1595138481 - ami-026d81fd6f3af6176**

Root Device Type: ebs Virtualization type: hvm

If you plan to use this AMI for an application that benefits from Microsoft License Mobility, fill out the [License Mobility Form](#). Don't show me this again

**Instance Type** [Edit instance type](#)

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.medium	Variable	2	4	EBS only	-	Low to Moderate

**Security Groups** [Edit security groups](#)

**Security group name:** launch-wizard-6  
**Description:** launch-wizard-6 created 2020-07-23T08:40:55.038-04:00

Type	Protocol	Port Range	Source	Description
RDP	TCP	3389	-	
HTTP	TCP	80	0.0.0.0/0, ::/0	

[Cancel](#) [Previous](#) [Launch](#)

## Review Instance Launch

- This opens a module window that prompts you to an existing key pair or to create a new key pair. If you do not know what this means I suggest you create a new key pair and put it in a folder that you have access to. If all went well you will see a green colored headline that says "Your instances are now launching."

## 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](#).

Create a new key pair



Key pair name

WindowsLucee

Download Key Pair



You have to download the **private key file** (\*.pem file) before you can continue. **Store it in a secure and accessible location.** You will not be able to download the file again after it's created.

Cancel

Launch Instances

- You are on the "Launch Status" page. Go to the bottom right and click the button labeled "View Instances."

Services ▾ Resource Groups ▾ ⬆

Support ▾

Launch Status

**Your instances are now launching**  
The following instance launches have been initiated: [i-00bde651a164a5614](#) [View launch log](#)

**Get notified of estimated charges**  
[Create billing alerts](#) to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier).

**How to connect to your instances**  
Your instances are launching, and it may take a few minutes until they are in the **running** state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances. Click **View Instances** to monitor your instances' status. Once your instances are in the **running** state, you can **connect** to them from the Instances screen. [Find out](#) how to connect to your instances.

▼ Here are some helpful resources to get you started

- How to connect to your Windows instance
- Learn about AWS Free Usage Tier

- Amazon EC2: User Guide
- Amazon EC2: Microsoft Windows Guide
- Amazon EC2: Discussion Forum

**While your instances are launching you can also**

- Create [status check alarms](#) to be notified when these instances fail status checks. (Additional charges may apply)
- Create and attach [additional EBS volumes](#) (Additional charges may apply)
- Manage [security groups](#)

View Instances ▾

- Select your running instance. This will open some tabs at the bottom of the page. Click the action menu at the top of the page. Then click Windows Password. This will open a

dialog asking you to decrypt your Windows RDP administrative password using the pem file you downloaded or the pem file you selected.

The screenshot shows the AWS Management Console interface. On the left is a navigation sidebar with categories like EC2 Dashboard, Events, Tags, Limits, Instances, Images, and Elastic Block Store. The main area displays a table of EC2 instances. One instance, 'Ortus Lucee', is selected, and its 'Actions' menu is open. The menu includes options like 'Connect', 'Get Windows Password', 'Create Template From Instance', and 'Launch More Like This'. Below the table, the details for the selected instance are shown, including its ID, state (running), type (t2.medium), and private DNS.

**Instance Table:**

Name	Instance ID	Availability Zone	Instance State
Ortus Lucee ...	i-00bde651a16...	us-east-1f	running

**Instance Details:**

Instance: **i-00bde651a164a5614** (Ortus Lucee CFML engine 5.3.6.61 (Windows Server 2019)) **Public**

Description	
Instance ID	i-00bde651a164a5614
Instance state	running
Instance type	t2.medium
Finding	Opt-in to AWS Compute Optimizer for recommendations. <a href="#">Learn more</a>
Private DNS	ip-172-31-68-160.ec2.internal

## Retrieve Default Windows Administrator Password



### Password Decryption Successful

The password for instance i-00bde651a164a5614 (Ortus Lucee CFML engine 5.3.6.61 (Windows Server 2019)) was successfully decrypted.



### Password change recommended

We recommend that you change your default password. Note: If a default password is changed, it cannot be retrieved through this tool. It's important that you change your password to one that you will remember.

You can connect remotely using this information:

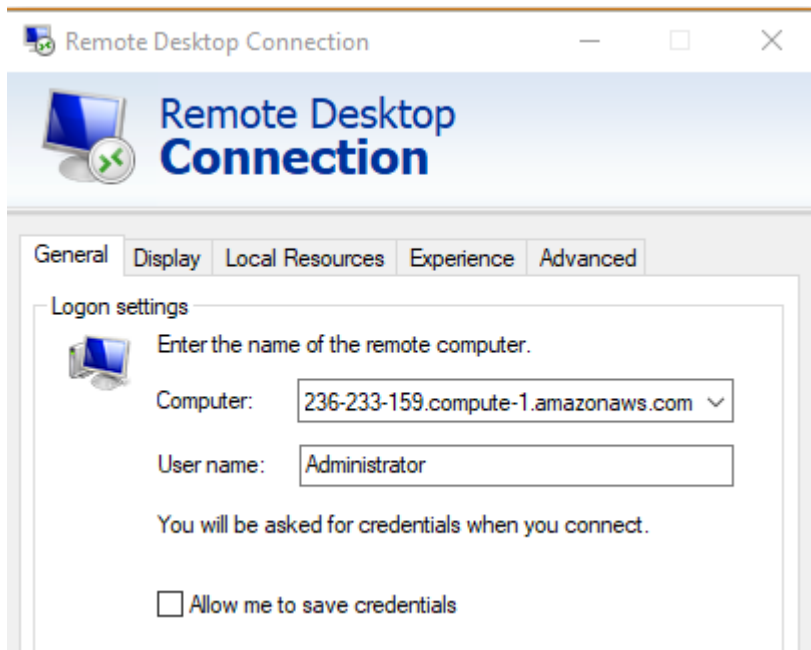
**Public DNS** ec2-3-236-233-159.compute-1.amazonaws.com

**User name** Administrator

**Password** rMUo=Cit2k?tYUV(p@;)QiY!\$@kEnCX&

Close

- Look to the right on the description tab and look for "Public DNS (IPv4)." To the right of this text is the dns name. Copy that name and paste it in a browser. It should look something like this.
- `ec2-{public_dns}.compute-1.amazonaws.com`
- Paste that URL in a browser and you should see the default ColdBox site
- Let's RDP to the server.



# Managing your web site

# Changelog

**Version windows-v1.0.0\_5.3.6.61**

**Digital Ocean**



**Coming Soon..**

Azure

**Coming Soon..**

**Google Cloud**

**Coming Soon...**