

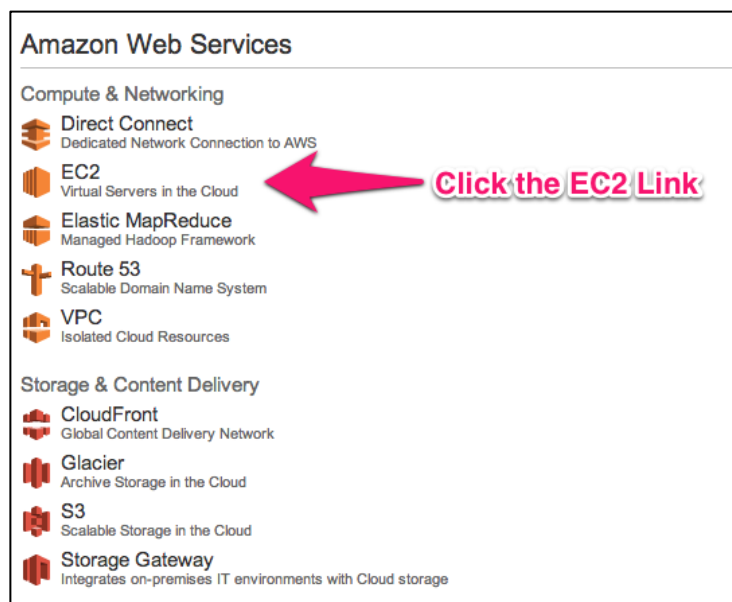
## Starting up a Cypress AMI

The Cypress Certification tool provides an Amazon Machine Image that should allow you to easily start up an instance of the Cypress application. An AMI is a virtual machine template that can be used to clone an instance of an Amazon Elastic Compute Cloud virtual machine. Amazon Virtual machines can be run for a low cost hourly fee (see: <http://aws.amazon.com/ec2/pricing/>). The following instructions will walk you through cloning your own instance and finalizing the confirmation of Cypress.

Begin by going to the Amazon EC2 console:

<https://console.aws.amazon.com/console/home>

Log into the EC2 console using an amazon account, or create a new account. On the Main screen select the EC2 link under Amazon Web Services



On the EC2 Dashboard, you should see a yellow box labeled “Getting Started” Click the Launch Instance button.

**EC2 Dashboard**

Events

INSTANCES

- Instances
- Spot Requests
- Reserved Instances

IMAGES

- AMIs
- Bundle Tasks

ELASTIC BLOCK STORE


- Volumes
- Snapshots

NETWORK & SECURITY

- Security Groups
- Elastic IPs
- Placement Groups
- Load Balancers
- Key Pairs
- Network Interfaces

### Getting Started


To start using Amazon EC2 you will want to launch a virtual server, known as an Amazon EC2 instance.

**Launch Instance**  **Click Here**

Note: Your instances will launch in the region.




### Service Health

Service Status

Current Status	Details
 Amazon EC2 (US East - N. Virginia)	Service is operating normally

[View complete service health details](#)

Availability Zone Status


Current Status	Details
 us-east-1a	Availability zone is operating normally
 us-east-1b	Availability zone is operating normally
 us-east-1c	Availability zone is operating normally

This should bring up the Create New instance dialog. Make sure the Classic Wizard option is selected and click Continue.

### Create a New Instance

Select an option below:

- ☒ **Classic Wizard**  
Launch an On-Demand or Spot instance using the classic wizard with fine-grained control over how it is launched.
- ☐ **Quick Launch Wizard**  
Launch an On-Demand instance using an editable, default configuration so that you can get started in the cloud as quickly as possible.
- ☐ **AWS Marketplace**  
AWS Marketplace is an online store where you can find and buy software that runs on AWS. Launch with 1-Click and pay by the hour.

**Select Classic Wizard** 








#### Launch with the Classic Wizard

**Request Instances Wizard**


CHOOSE AN AMI | INSTANCE DETAILS | CREATE KEY PAIR | CONFIGURE FIREWALL | REVIEW

Choose an Amazon Machine Image (AMI) from one of the tabbed lists below by clicking its Select button.

Quick Start | My AMIs | Community AMIs

	<b>Basic 32-bit Amazon Linux AMI 2011.02.1 Beta</b> (AMI Id: ami-8c1fccc5) Amazon Linux AMI Base 2011.02.1, EBS boot, 32-bit architecture with Amazon EC2 AMI Tools. Root Device Size: 8 GB	 <b>Select</b>
	<b>Basic 64-bit Amazon Linux AMI 2011.02.1 Beta</b> (AMI Id: ami-8e1fccc7) Amazon Linux AMI Base 2011.02.1, EBS boot, 64-bit architecture with Amazon EC2 AMI Tools. Root Device Size: 8 GB	 <b>Select</b>
	<b>Red Hat Enterprise Linux 6.1 32 bit</b> (AMI Id: ami-0cbb4265) Red Hat Enterprise Linux version 6.1, EBS-boot, 32-bit architecture. Root Device Size: 7 GB	<b>Select</b>
	<b>Red Hat Enterprise Linux 6.1 64 bit</b> (AMI Id: ami-5e837b37) Red Hat Enterprise Linux version 6.1, EBS-boot, 64-bit architecture. Root Device Size: 6 GB	<b>Select</b>
	<b>SUSE Linux Enterprise Server 11 64-bit</b> (AMI Id: ami-e4e3578d) SUSE Linux Enterprise Server 11 Service Pack 1 basic install, EBS boot, 64-bit architecture with Amazon EC2 AMI Tools preinstalled, Apache 2.2, MySQL 5.0, PHP 5.3, Ruby 1.8.7, and Rails 2.3. Root Device Size: 15 GB	<b>Select</b>

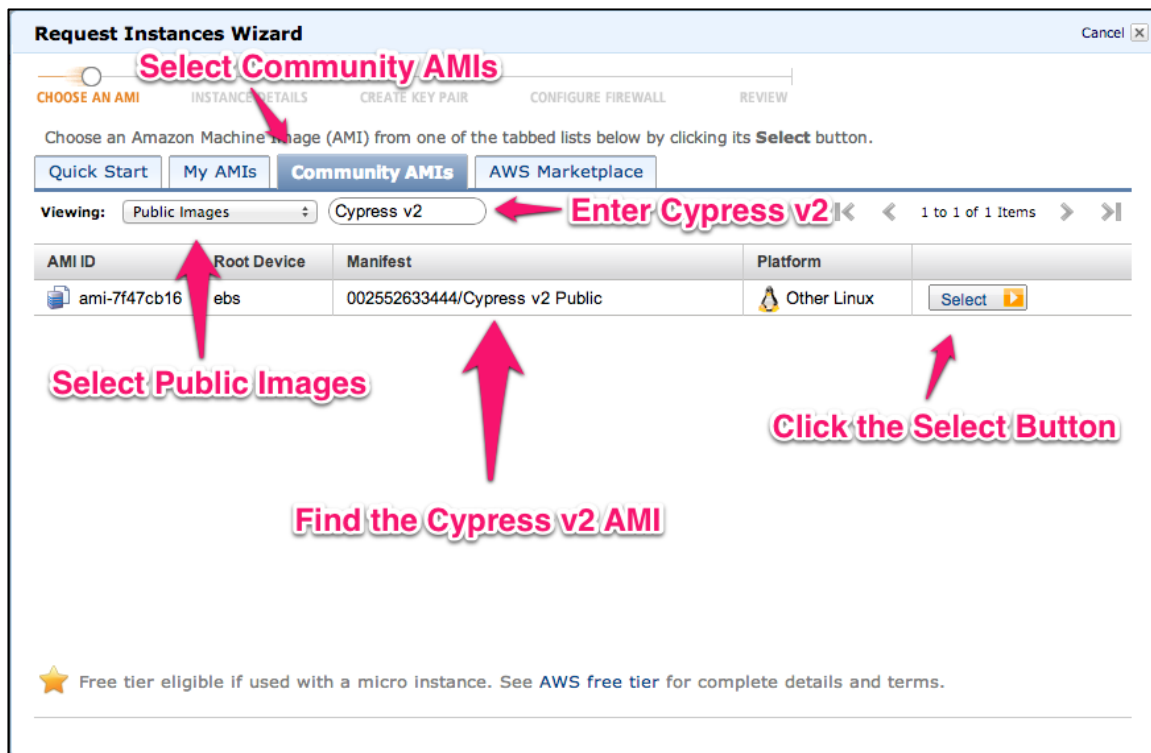
★ Free tier eligible if used with a micro instance. See [AWS free tier](#) for complete details and terms.

**Continue** 

**Click Continue**

[Submit Feedback](#) [Getting Started Guide](#)

This should open the Request Instances Wizard. On this screen select the Community AMIs tab. Then next select “Public Images” from the dropdown and enter “Cypress V2” into the text box. It may take a minute or more for the public AMI to be found. Once the search finishes, you should see an AMI with the manifest “Cypress V2 Public”. Click on the Select button next to this AMI. Note that there will be more than 1 AMI listed. Please check to make sure you are choosing the version of Cypress that you wish to run.



On the next screen select a medium instance from “Instance Type” and click Continue.

**Request Instances Wizard** Cancel

CHOOSE AN AMI **INSTANCE DETAILS** CREATE KEY PAIR CONFIGURE FIREWALL REVIEW

Provide the details for your instance(s). You may also decide whether you want to launch your instances as "on-demand" or "spot" instances.

**Number of Instances:**  **Instance Type:**

**Launch as an EBS-Optimized instance (additional charges apply):** ☐ Not supported for this instance type

**Launch Instances**

EC2 Instances let you pay for compute capacity by the hour with no long term commitments. This transforms what are commonly large fixed costs into much smaller variable costs.

**Launch into:** ☒ EC2 ☐ VPC

**Availability Zone:**

☐ Request Spot Instances

**Click Continue**

[< Back](#) [Continue](#)

On the next screen click Continue

**Request Instances Wizard** Cancel

CHOOSE AN AMI **INSTANCE DETAILS** CREATE KEY PAIR CONFIGURE FIREWALL REVIEW

**Number of Instances:** 1 **Availability Zone:** No Preference

**Advanced Instance Options**

Here you can choose a specific kernel or RAM disk to use with your instances. You can also choose to enable CloudWatch Detailed Monitoring or enter data that will be available from your instances once they launch.

**Kernel ID:**  **RAM Disk ID:**

**Monitoring:** ☐ Enable CloudWatch detailed monitoring for this instance (additional charges will apply)

**User Data:**

☒ as text ☐ as file

(Use shift+enter to insert a newline)

☐ base64 encoded

**Termination Protection:** ☐ Prevention against accidental termination. **Shutdown Behavior:**

**IAM Role:**

**Click Continue**

[< Back](#) [Continue](#)

On the next screen click Continue again.

**Request Instances Wizard** Cancel

CHOOSE AN AMI **INSTANCE DETAILS** CREATE KEY PAIR CONFIGURE FIREWALL REVIEW

**Number of Instances:** 1  
**Availability Zone:** No Preference

**Storage Device Configuration**  
Your instance will be launched with the following storage device settings. Edit these settings to add EBS volumes, instance store volumes, or edit the settings of the root volume.

Type	Device	Snapshot ID	Size	Volume Type	IOPS	Delete on Termination
Root	/dev/sda1	snap-53fd5e1e	20	standard		true

0 EBS Volumes 0 Ephemerals Edit

**Click Continue**

< Back Continue

On the next screen enter a name for the AMI and click continue

**Request Instances Wizard** Cancel

CHOOSE AN AMI **INSTANCE DETAILS** CREATE KEY PAIR CONFIGURE FIREWALL REVIEW

Add tags to your instance to simplify the administration of your EC2 infrastructure. A form of metadata, tags consist of a case-sensitive key/value pair, are stored in the cloud and are private to your account. You can create user-friendly names that help you organize, search, and browse your resources. For example, you could define a tag with key = Name and value = Webserver. You can add up to 10 unique keys to each instance along with an optional value for each key. For more information, go to [Using Tags](#) in the *EC2 User Guide*.

Key (127 characters maximum)	Value (255 characters maximum)	Remove
Name	Cypress	<span>✖</span>
		<span>✖</span>

**Enter a name for the AMI**

**Click Continue**

< Back Continue

On the next screen click the Create a new Key Pair option if you do not have an EC2 key pair already. If you have an existing key pair you can use that instead. To create a new key pair, enter a name for the key pair, and click on the Create & Download link. Save the downloaded file to a safe place you will remember. You will need this file in order to log into the Machine Instance.

**Request Instances Wizard** Cancel

CHOOSE AN AMI   INSTANCE DETAILS   **CREATE KEY PAIR**   CONFIGURE FIREWALL   REVIEW

Public/private key pairs allow you to securely connect to your instance after it launches. For Windows Server Instances, a Key Pair is required to set and deliver a secure encrypted password. For Linux Server Instances, a key pair will allow you to SSH into your instance. To create a key pair, enter a name and click **Create & Download your Key Pair**. You will then be prompted to save the private key to your computer. Note, you only need to generate a key pair once - not each time you want to deploy an Amazon EC2 instance.

☐ Choose from your existing Key Pairs

☒ **Create a new Key Pair**

1. Enter a name for your key pair:\*  (e.g., doekey) **Enter a Name**

2. Click to create your key pair:\* **Select New Key**

**Create & Download your Key Pair** **Download the key**

Save this file in a place you will remember. You can use this key pair to launch other instances in the future or visit the Key Pairs page to create or manage existing ones.

☐ Proceed without a Key Pair

[< Back](#) [Continue >](#)

On the next screen you can either use an existing security rule if you have one, or you can create a new security rule. These security rules dictate what ports can be accessed on the new image. At a minimum you will need to add HTTP (port 80) and SSH (port 22). To create a new group select the “create a new security group” option. Next, enter a name and description. You will need to add two security rules, one for HTTP and one for SSH. To add the HTTP rule select HTTP from the “Create a new rule” dropdown and click Add Rule. To add the SSH rule select SSH from the “Create a new rule” dropdown and click Add Rule. Once you have added the two rules click the continue button.

Request Instances Wizard

Cancel

CHOOSE AN AMI

INSTANCE DETAILS

CREATE KEY PAIR

CONFIGURE FIREWALL

REVIEW

Security groups determine whether a network port is open or blocked on your instances. You may use an existing security group, or we can help you create a new security group to allow access to your instances using the suggested ports below. Add additional ports now or update your security group anytime using the Security Groups page.

Choose one or more of your existing Security Groups

Create a new Security Group

Group Name

cypress\_group

Group Description

Cypress Security Group

Inbound Rules

Create a new rule:

Custom TCP rule

Port range:

(e.g., 80 or 49152-65535)

Source:

0.0.0.0/0

(e.g., 192.168.2.0/24, sg-47ad482e, or 1234567890/default)

Add Rule

TCP	Port (Service)	Source	Action
	80 (HTTP)	0.0.0.0/0	Delete
	22 (SSH)	0.0.0.0/0	Delete

Add a name and description

Select HTTP and click Add Rule  
Then select SSH and click Add Rule

Click here to add the rule after each Selection

Click Continue

Back

Continue

On the next screen, review your selections and then click Launch.

Request Instances Wizard

Cancel

CHOOSE AN AMI

INSTANCE DETAILS

CREATE KEY PAIR

CONFIGURE FIREWALL

REVIEW

Please review the information below, then click **Launch**.

AMI:

Other Linux AMI ID ami-7f47cb16 (x86\_64) [Edit AMI](#)

Number of Instances:

1

Availability Zone:

No Preference

Instance Type:

M1 Medium (m1.medium)

Instance Class:

On Demand

[Edit Instance Details](#)

EBS-Optimized:

No

Monitoring:

Disabled

Termination Protection:

Disabled

Tenancy:

Default

Kernel ID:

Use Default

Shutdown Behavior:

Stop

RAM Disk ID:

Use Default

Network Interfaces:

Secondary IP Addresses:

User Data:

IAM Role:

[Edit Advanced Details](#)

Key Pair Name:

cypress\_key

[Edit Key Pair](#)

Security Group(s):

sg-ba8abdd2

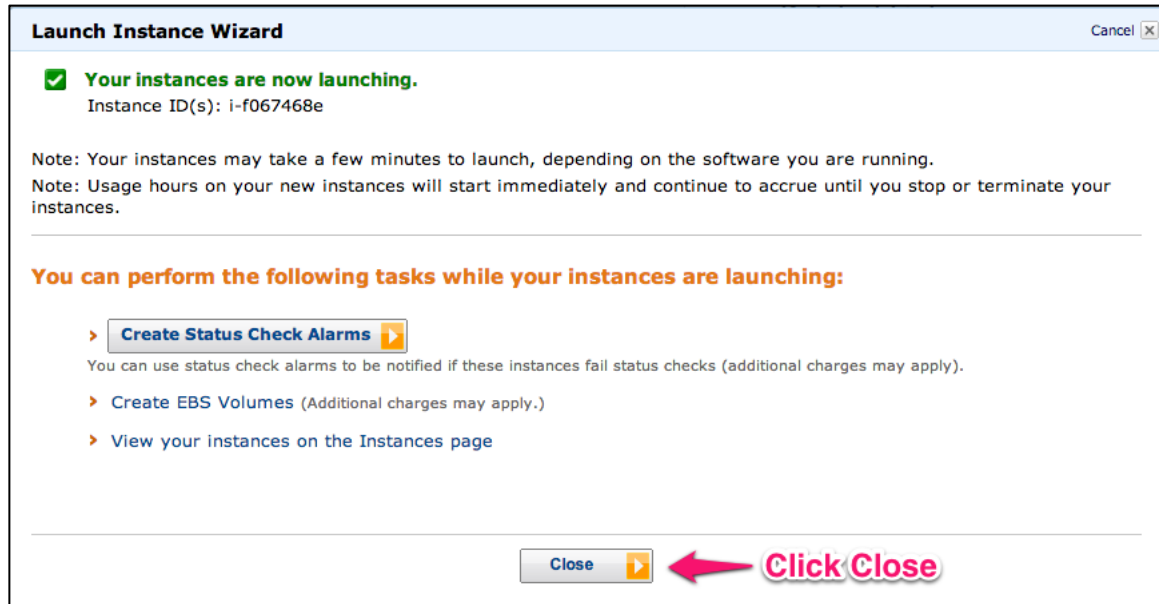
[Edit Firewall](#)

Back

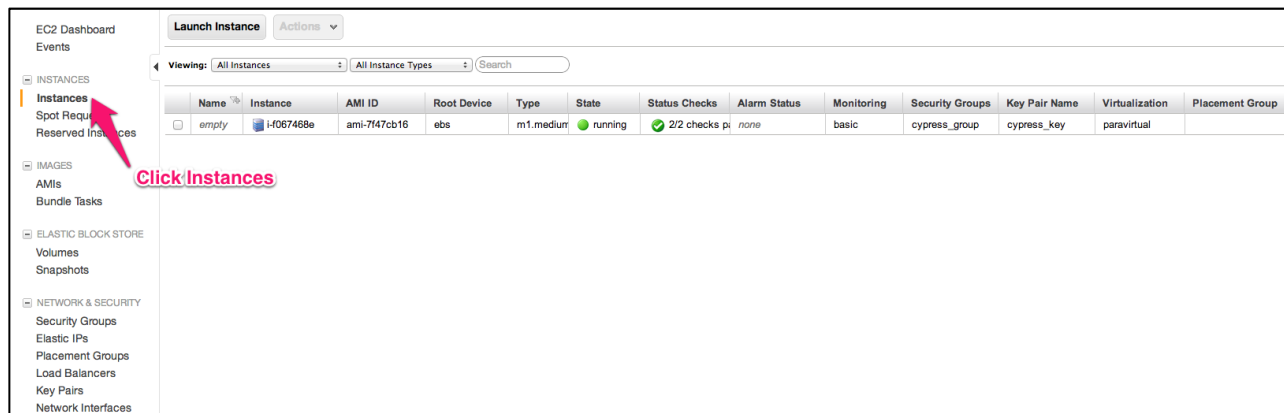
Launch

Click Launch

Click the close button on the final screen.



Back on the EC2 Dashboard, click instances.



Right click on the cypress instance and select connect. Expand the “connect with standalone SSH Client link”. You should see connection information for SSH. Use this command from the command line with the SSH command, or use an SSH client to connect to your new instance. Instructions on connecting from windows can be found at

<http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/putty.html>

You should connect to the server using the username “ubuntu”. You should not need a password since you are using a key pair for security. Connection string should look something like the following. Note that your connection string will be specific to your instance and can be found on the connect popup:

ubuntu@ec2-xx-xxx-xxx-xxx.compute-1.amazonaws.com



Once you have logged into your instance you will need to update the value sets from VSAC and load the measures into the system. You can do this by running the following command after you log in.

When using a Cypress 2.0.0 or 2.0.1 AMI you can use the following command to proceed.

```
sudo ./install_cypress.sh --import --nlm_user <user> --nlm_passwd <pass>
```

For Cypress 2.1.0 AMI installs please run the following commands once you log into the system, substituting your nlm username and password where relevant.

```
cd /home/cypress/cypress
```

```
sudo su - cypress
```

```
wget --user=username --password=password http://demo.projectcypress.org/bundles/bundle-latest.zip
```

```
source /usr/local/rvm/scripts/rvm
```

```
bundle exec rake bundle:import[./bundle-latest.zip,false,true] RAILS_ENV=production
```

For Cypress 2.2.0 AMI installs please run the following commands once you log into the system. You will be prompted for your NLM Username and Password to download the measure

```
cd /home/cypress/cypress
```

```
sudo su - cypress
```

```
bundle exec rake cypress:bundle_download_and_install RAILS_ENV=production
```

The install process has to download value sets and the measures. This may take several minutes.

Once the script is complete, you can open up the Cypress application in a web browser. The hostname is the same hostname you used to SSH into without the username section "ubuntu@". The URL will be similar to the following.

```
http:// ec2-xx-xxx-xxx-xxx.compute-1.amazonaws.com/
```

Once the Cypress application login screen comes up select the "Create new account" link, create a new account, and then log in.