

Start Using Amazon Web Services in Your ColdFusion Apps

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WELCOME TO DEVOPS
ADVENTURE!
YOU ARE STANDING INSIDE AWS.
NEARBY IS AN ANGRY ELB.
THERE ARE SOME SSH KEYS ON
THE GROUND.

– @dysinger

Best decision we ever make in startup was outsource all site outage to Cloud provider.

– @Devops_Borat

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How does *AWS* fit with ?

How do I run  in *AWS*?

- ① Hello AWS
- ② Simple, Cheap Storage with S3
- ③ Plugging Other AWS Services into CF
- ④ Running ColdFusion [11] on AWS
- ⑤ Lessons Learned Running with AWS

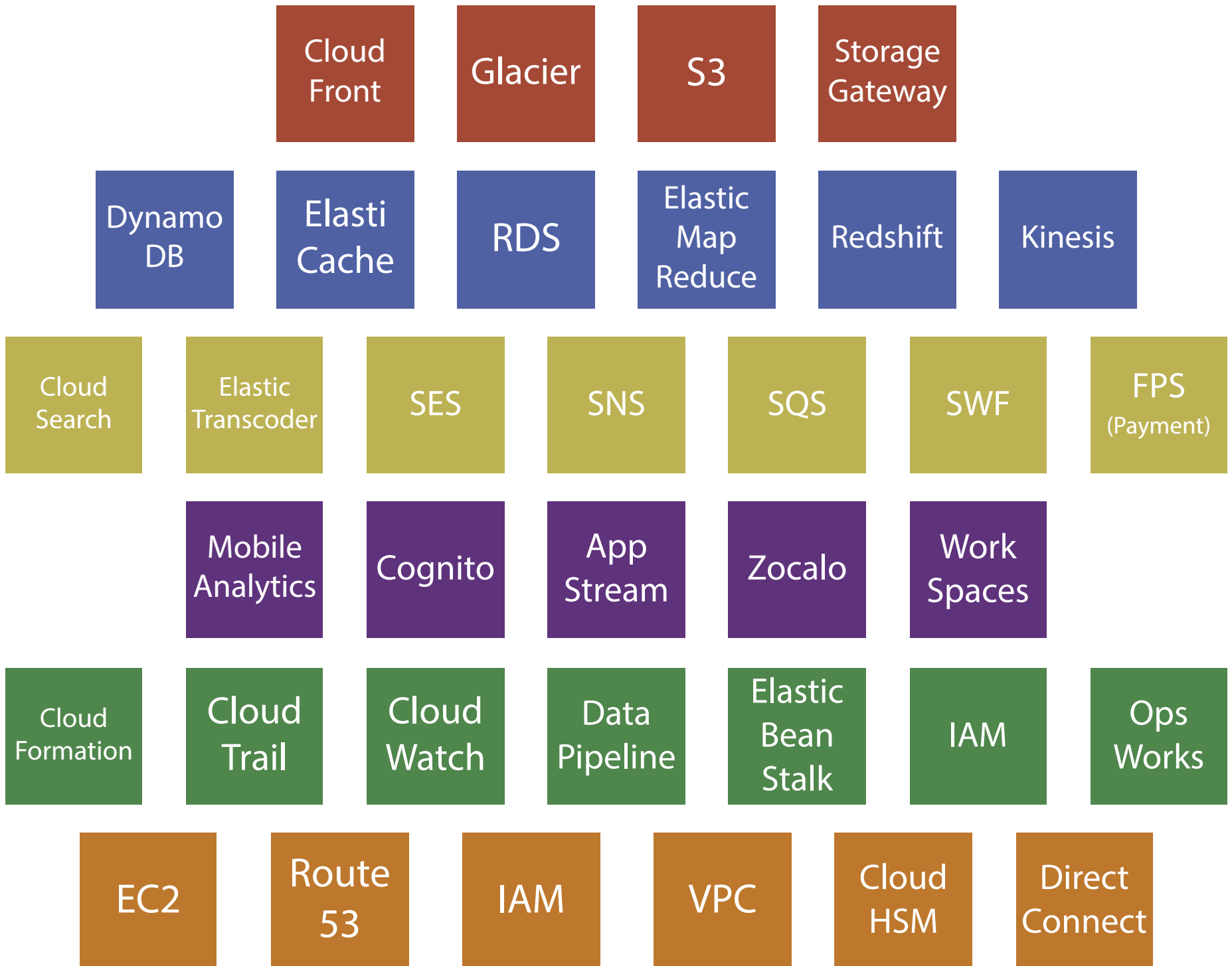


Hello AWS

Or, what can *AWS* do for me?



AWS = Utility Computing



AWS is HTTP-based development

```
PUT /photos/puppy.jpg HTTP/1.1
Content-Type: image/jpeg
Content-Length: 94328
Host: mybucket.s3.amazonaws.com
Date: Tue, 27 Mar 2013 21:15:45 +0000
```

```
Authorization: AWS AKIAIOSFODNN7EXAMPLE:
MyyxRY7whkBe+bq8fHCL/2kKUg=
```

AWS SDKs for:

- Java*
- PHP
- Ruby
- Node.js
- JavaScript
- Python
- .NET
- Android
- iOS

*ColdFusion

: Making Stuff Easy

Simple, Cheap Storage with S3

S3

Simple Storage Service

Store all the things.

Regions

- US Standard (NoVA)
- US West (Oregon)
- US West (NorCal)
- US GovCloud
- EU (Ireland)
- Asia Pacific (Singapore)
- Asia Pacific (Sydney)
- Asia Pacific (Tokyo)
- Asia Pacific (Beijing)*
- South America (São Paulo)

99.99999999999999% durability*

99.99% availability

*Stuff rarely gets lost.

\$0.03 per GB stored

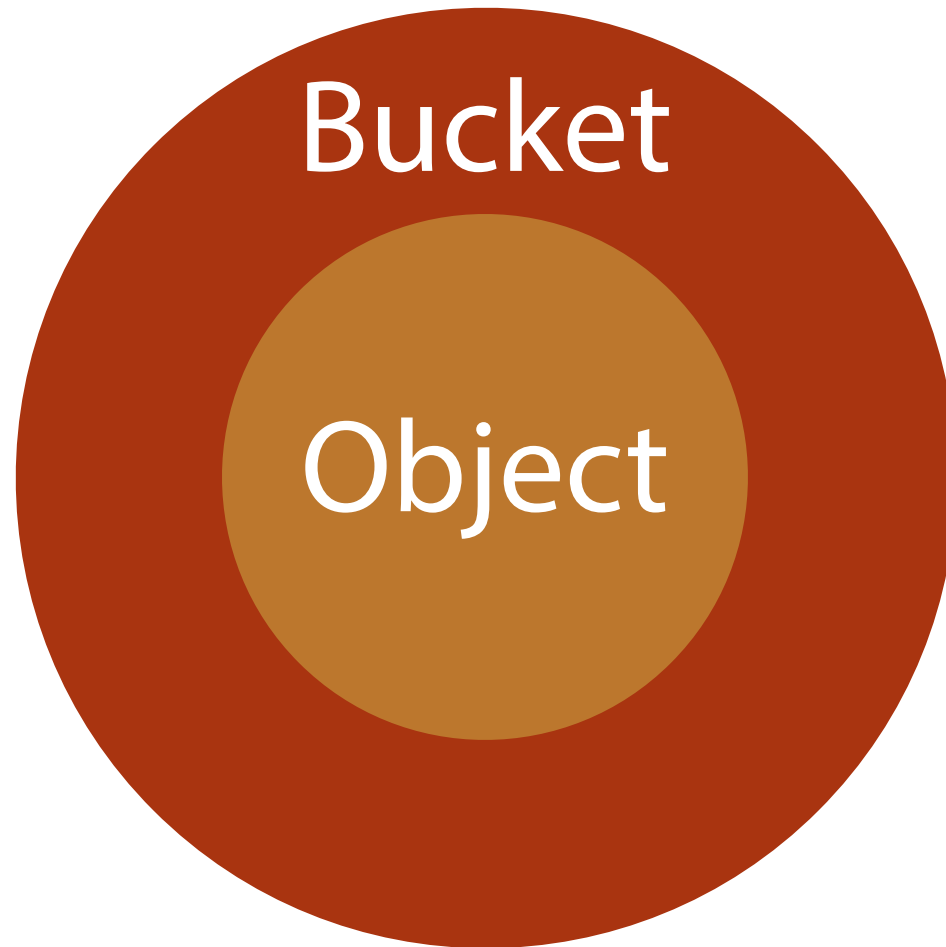
\$0.004 per 10,000 GET

\$0.005 per 1,000 PUT

\$0.12 per GB out after 1GB

Bucket

`myfiles.s3.amazonaws.com`



Everything is an object

Objects have metadata

Everything in S3 is private by default.



`http://mybucket.s3.amazonaws.com/
path/to/file.png`

~~C:/~~

s3://

Basic ColdFusion Integration

```
<cffile action="read"  
file="s3://somebucket/somefile.txt"  
variable="fileData" />
```

```
<cffile action="write"  
file="s3://somebucket/somefile.txt"  
output="#someStuff#" />
```

```
<cffile action="delete"  
file="s3://somebucket/somefile.txt" />
```

Basic ColdFusion Integration

```
<cfdirectory action="create"  
directory="s3://somebucket/  
someDirectory" />
```

```
<cfdirectory action="list"  
directory="s3://somebucket/  
someDirectory" />
```

ColdFusion Example

```
<cfif not directoryExists("s3://somebucket.s3.amazonaws.com")>
    <cfset perms = [
        {group="all", permission="read"},
        {id="canonicalIDofYourAWSAccount", permission="full_control"}
    ]>
    <cfdirectory action="create" directory="s3://
somebucket.s3.amazonaws.com" storeacl="#perms#">
</cfif>

<cfset fileWrite("s3://somebucket.s3.amazonaws.com/myFile.txt",
"#someOutput#")>

<cfset files = directoryList("s3://somebucket.s3.amazonaws.com")>
```

Tags and Functions Which Support S3

- `cffile*`
- `cfdirectory`
- `cfdocument`
- `cfftp`
- `cffeed`
- `cfimage`
- `cfloopt†`
- `fileOpen`
- `fileClose`
- `fileCopy`
- `fileDelete`
- `fileExists`
- `fileisEOF`
- `fileMove`
- `fileWrite`
- `fileRead`
- `fileReadBinary`
- `fileReadLine`
- `fileSetLastModified`
- `getFileInfo`
- `getDirectoryFromPath`
- `directoryCreate`
- `directoryDelete`
- `directoryExists`
- `directoryList`
- `imageNew`
- `imageRead`
- `imageWrite`
- `imageWriteBase64`
- `isImageFile`
- `isPDFFile`

*Except rename

† Looping over directory information

SDK for Other Languages

JavaScript:

```
var bucket = new AWS.S3({params: {Bucket: 'myBucket'}});
var params = {Key: file.name, ContentType: file.type, Body:
file};
bucket.putObject(params, function (err, data) {
    results.innerHTML = err ? 'ERROR!' : 'UPLOADED.';
});
```

Ruby:

```
s3 = AWS::S3.new
key = File.basename(file_name)
s3.buckets[bucket_name].objects[key].write(:file => file_name)
puts "Uploading file #{file_name} to bucket #{bucket_name}."
```

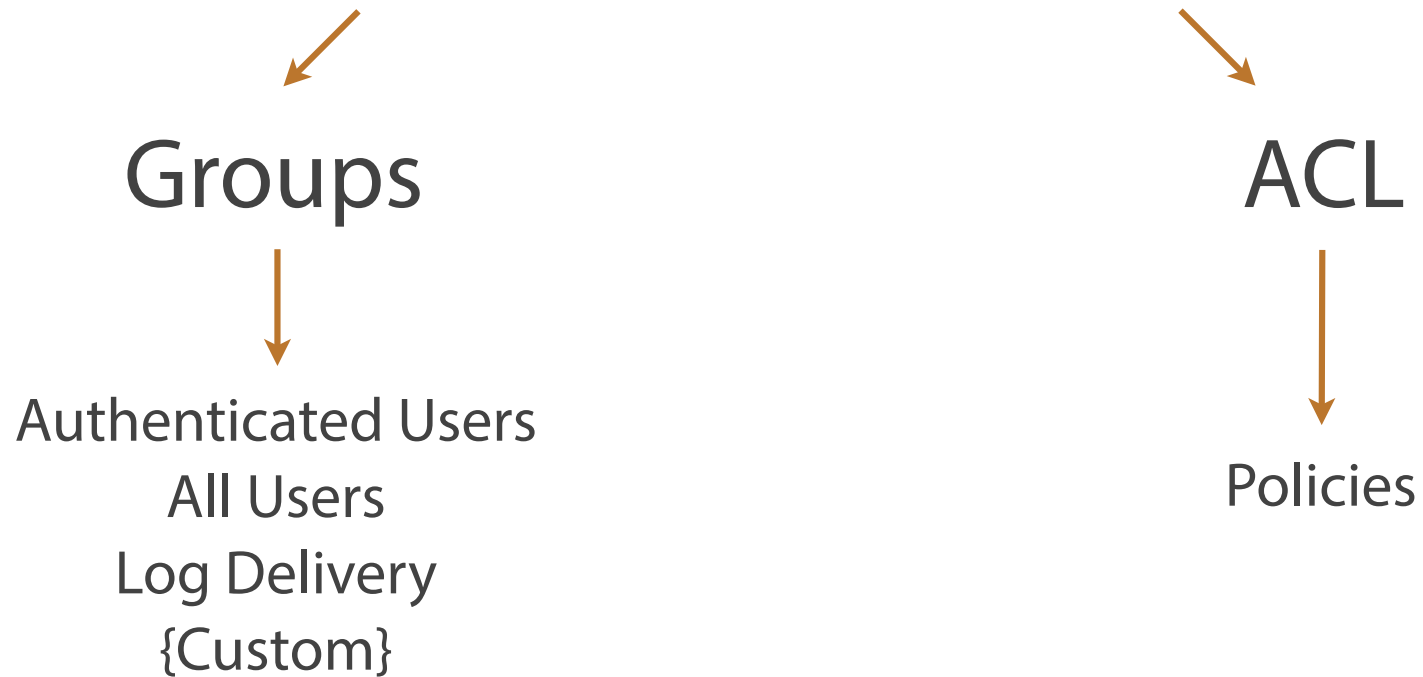

Um, don't you need credentials?



A Brief Detour
into AWS Security Basics



Master AWS Account



Sample Policy

```
{
  "Version": "2008-10-17",
  "Statement": [{
    "Sid": "Add Read Permissions",
    "Effect": "Allow",
    "Principal": {
      "AWS": "*"
    },
    "Action": ["s3:GetObject"],
    "Resource": ["arn:aws:s3:::bucket/*"]
  }
]
```

Requests from a Specific Domain Policy

```
{
  "Version":"2008-10-17",
  "Id":"http referrer policy example",
  "Statement":[
    {
      "Sid":"Allow get requests referred by www.mysite.com
and mysite.com",
      "Effect":"Allow",
      "Principal":"*",
      "Action":"s3:GetObject",
      "Resource":"arn:aws:s3:::example-bucket/*",
      "Condition":{"
        "StringLike":{"
          "aws:Referer":[
            "http://www.mysite.com/*",
            "http://mysite.com/*"
          ]
        }
      }
    }
  ]
}
```

S3 requests
require IAM credentials.

Setting AWS IAM credentials

1. In the individual S3 call
2. In application.cfc

Setting AWS IAM credentials

```
<cffile action="read"  
file="s3://  
accessKey:awsSecretKey@somebucket/  
somefile.txt" variable="fileData" />
```

Setting AWS IAM credentials

In application.cfc:

```
this.s3.accessKeyId="accessKey";  
this.s3.awsSecretKey="secretKey";
```

ColdFusion Example

```
<cfif not directoryExists("s3://somebucket.s3.amazonaws.com")>  
  <cfset perms = [  
    {group="all", permission="read"},  
{id="canonicalIDofYourAWSAccount", permission="full_control"}  
  ]>  
  <cfdirectory action="create" directory="s3://  
somebucket.s3.amazonaws.com" storeacl="#perms#">  
</cfif>  
  
<cfset fileWrite("s3://somebucket.s3.amazonaws.com/myFile.txt",  
"#someOutput#")>  
  
<cfset files = directoryList("s3://somebucket.s3.amazonaws.com")>
```

Everything in S3 is private by default.

ColdFusion Example

```
<cfif not directoryExists("s3://somebucket.s3.amazonaws.com")>
  <cfset perms = [
    {group="all", permission="read"},
    {id="canonicalIDofYourAWSAccount", permission="full_control"}
  ]>
  <cfdirectory action="create" directory="s3://
somebucket.s3.amazonaws.com" storeacl="#perms#">
</cfif>

<cfset fileWrite("s3://somebucket.s3.amazonaws.com/myFile.txt",
"#someOutput#")>

<cfset files = directoryList("s3://somebucket.s3.amazonaws.com")>
```

Get/set file ACL with
`storeGetACL()`
`storeSetACL()`

Setting permissions with ACLs

```
<cfset permissions = storeGetACL(fileOnS3) />  
<cfset arrayAppend(permissions,  
{group="all",permission="read"}) />  
<cfset storeSetACL(fileOnS3, "#permissions#") />
```

Get/set object metadata with
`storeGetMetadata()`
`storeSetMetadata()`

Setting content type

```
<cfset metadataStruct.content_type=  
"video/webm" />  
<cfset storeSetMetadata(s3File,  
"#metadataStruct#") />
```

More cool stuff

Expire URLs

Changing file properties
Requires request signing.
on a per-request basis

Upload to S3 from the browser

S3RequestSigningUtils on GitHub

github.com/brianklaas/ctIS3Utils

*Requires CF10+

S3 is storage, not a file system

Can get basic file info with

```
<cfhttp url="http://bucket.s3.amazonaws.com/filename" method="head">
```

Plugging Other AWS Services into CF

DynamoDB

NoSQL database service

Elasticache

Distributed memcached or Redis

CloudFront

Cheap global content delivery network

SES

Bulk email service – Can be your <cfmail> mail server

SQS

High-performance message queue service

Relational Database Service

RDS

IOPS

RDS Costs

- Database license
- IOPS
- Data transfer in/out
- You can't alter the server setup.

AWS is
HTTP-based development

Running CF11 in AWS

Or, exploring the official ColdFusion 11 AMI

EC2



EC2 Instance Types

M1 General Purpose Extra Large	15.0 GB	8 (4 core x 2 unit)	1680 GB (4 * 420 GB)	High / 1000 Mbps	m1.xlarge	\$0.350 hourly	\$0.598 hourly
M1 General Purpose Large	7.5 GB	4 (2 core x 2 unit)	840 GB (2 * 420 GB)	Moderate / 500 Mbps	m1.large	\$0.175 hourly	\$0.299 hourly
M1 General Purpose Medium	3.75 GB	2 (1 core x 2 unit)	410 GB	Moderate	m1.medium	\$0.087 hourly	\$0.149 hourly
M1 General Purpose Small	1.7 GB	1 (1 core x 1 unit)	160 GB	Low	m1.small	\$0.044 hourly	\$0.075 hourly
M2 High Memory Double Extra Large	34.2 GB	13 (4 core x 3.25 unit)	850 GB	Moderate / 500 Mbps	m2.2xlarge	\$0.490 hourly	\$0.690 hourly
M2 High Memory Extra Large	17.1 GB	6.5 (2 core x 3.25 unit)	420 GB	Moderate	m2.xlarge	\$0.245 hourly	\$0.345 hourly
M2 High Memory Quadruple Extra Large	68.4 GB	26 (8 core x 3.25 unit)	1680 GB (2 * 840 GB)	High / 1000 Mbps	m2.4xlarge	\$0.980 hourly	\$1.380 hourly
M3 General Purpose Double Extra Large	30.0 GB	26 (8 core x 3.25 unit)	160 GB (2 * 80 GB SSD)	High / 1000 Mbps	m3.2xlarge	\$0.560 hourly	\$1.064 hourly
M3 General Purpose Extra Large	15.0 GB	13 (4 core x 3.25 unit)	80 GB (2 * 40 GB SSD)	High / 1000 Mbps	m3.xlarge	\$0.280 hourly	\$0.532 hourly
M3 General Purpose Large	7.5 GB	6.5 (2 core x 3.25 unit)	32 GB SSD	Moderate	m3.large	\$0.140 hourly	\$0.266 hourly
M3 General Purpose Medium	3.75 GB	3 (1 core x 3 unit)	4 GB SSD	Moderate	m3.medium	\$0.070 hourly	\$0.133 hourly
R3 High-Memory Double Extra Large	61.0 GB	26 (8 core x 3.25 unit)	160 GB SSD	High / 1000 Mbps	r3.2xlarge	\$0.700 hourly	\$1.080 hourly
R3 High-Memory Eight Extra Large	244.0 GB	104 (32 core x 3.25 unit)	640 GB (2 * 320 GB SSD)	10 Gigabit	r3.8xlarge	\$2.800 hourly	\$3.500 hourly
R3 High-Memory Extra Large	30.5 GB	13 (4 core x 3.25 unit)	80 GB SSD	Moderate / 500 Mbps	r3.xlarge	\$0.350 hourly	\$0.600 hourly
R3 High-Memory Large	15.25 GB	6.5 (2 core x 3.25 unit)	32 GB SSD	Moderate	r3.large	\$0.175 hourly	\$0.300 hourly
R3 High-Memory Quadruple Extra Large	122.0 GB	52 (16 core x 3.25 unit)	320 GB SSD	High / 1000 Mbps	r3.4xlarge	\$1.400 hourly	\$1.944 hourly
T1 Micro	0.613 GB	Burstable	0 GB (EBS only)	Very Low	t1.micro	\$0.020 hourly	\$0.020 hourly
T2 Medium	4.0 GB	Burstable	0 GB (EBS only)	Low to Moderate	t2.medium	\$0.052 hourly	\$0.072 hourly
T2 Micro	1.0 GB	Burstable	0 GB (EBS only)	Low to Moderate	t2.micro	\$0.013 hourly	\$0.018 hourly
T2 Small	2.0 GB	Burstable	0 GB (EBS only)	Low to Moderate	t2.small	\$0.026 hourly	\$0.036 hourly

Pick the EC2 instance type that has the right network, RAM and CPU for your tasks.

Use M3 instances

AMI on EC2



The Official Adobe CF11 AMI

- Windows Server 2012 Standard x64
 - m3.medium - \$0.24/hr = ~\$173/month
 - m3.large - \$0.49/hr = ~\$352/month
- Ubuntu 14.04
 - m3.medium - \$0.18/hr = ~\$129/month
 - m3.large - \$0.36/hr = ~\$259/month
- Includes EC2 charges
- Includes Adobe Support

20% less if
purchased on an
annual basis

Medium vs. Large Instances

- m3.medium
 - 3.5GB RAM
 - 3 ECUs (1 cores x 3 units)
 - 4GB SSD storage
 - Moderate IO performance (500 Mbps)
- m3.large
 - 7.5GB RAM
 - 6.5 ECUs (2 cores x 3.25 units)
 - 32GB SSD storage
 - Moderate IO performance (500 Mbps)

ECU = 1–1.2 Ghz
processor

AMI Setup

- CF11 Enterprise
- JRE 1.7.0_55 (64-bit)
- Windows: IIS 8.0.92
- Linux: Apache 2.4.7
- Both: MySQL 5.6.17

Launching the CF11 AMI

Stuff You Need Before You Start

- Custom Security Group (preferred)
- Key pair
- RDP (Windows) or SSH client (Linux)

Security Groups

Edit inbound rules ✕

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	
SSH ▾	TCP	22	Anywhere ▾ 0.0.0.0/0	✕
HTTP ▾	TCP	80	Anywhere ▾ 0.0.0.0/0	✕
RDP ▾	TCP	3389	Anywhere ▾ 0.0.0.0/0	✕

Add Rule Cancel Save

Found in the AWS Console under
EC2 ➔ Security Groups

Key Pair

- Public/private key
- Tied to a specific region
- Only one opportunity to download!

Found in the AWS Console under
EC2 ➔ Key Pairs

Purchase the AMI

- Select region and instance type
- EC2 Classic or VPC
- Use preconfigured security group or one of your own
- Select a key pair

ColdFusion 11 on Windows Server 2012 x64 >

Launch on EC2

1-Click Launch

Review, modify, and launch

Manual Launch

With EC2 Console, APIs or CLI

Click "Accept Terms & Launch with 1-Click" to launch this software with the settings below

Once you accept the terms, you will have access to launch any version of this software in any supported region. For future launches, you can return to this page or launch directly from the EC2 console, APIs or CLI.

Software Pricing

Subscription Term

- Hourly
 Annual

Applicable Instance Type

m1.large
 m1.xlarge
m3.medium
 m3.large
 m3.xlarge
 m3.2xlarge
 c3.large
 c3.xlarge
 c3.2xlarge
 c3.4xlarge

Hourly fee

\$0.13 / hour

Find instance details in EC2 instance section below.

Version

11, released 06/09/2014

Region

US East (Virginia)

EC2 Instance Type

m1.large
 m1.xlarge
m3.medium
 m3.large
 m3.xlarge
 m3.2xlarge
 c3.large
 c3.xlarge
 c3.2xlarge

Memory	3.75 GiB
CPU	3 EC2 Compute Units (1 virtual core)
Storage	1 x 4 GB SSD
Platform	64-bit
Network performance	Low
API Name	m3.large

Price for your selections:

\$0.24 / hour

\$0.13 m3.medium EC2 Instance usage fees +
 \$0.11 hourly software fee

\$0.05 / GB / month

EBS Magnetic Storage

\$0.05 / 1 million I/O requests

EBS Magnetic Storage

Free Trial

Try one instance of this product for 31 days. There will be no software charges but AWS infrastructure charges still apply. Free Trials will automatically convert to a paid subscription upon expiration.

Accept Terms & Launch with 1-Click

You will be subscribed to this software and agree that your use of this software is subject to the pricing terms and the seller's [End User License Agreement \(EULA\)](#) and your use of AWS services is subject to the [AWS Customer Agreement](#)

Cost Estimator

\$174.96 / month

m3.medium EC2 Instance usage fees
Assumes 24 hour use over 30 days

Software Charges

\$79.20 / month

\$79.20 hourly software fees for m3.medium

AWS Infrastructure Charges

\$95.76 / month

Cost varies for storage fees

\$95.76 hourly EC2 Instance fees for m3.medium

Varied EBS Storage and data transfer fees

Once you launch an instance, you start paying for it.

Connecting to the Instance

- Retrieve the Windows admin password
- Connect via RDP as “Administrator”
- Go through the Jumpstart Tool



Services ▾



IAM



S3



CloudFront



EC2

Edit ▾

EC2 Dashboard

Events

Tags

Reports

Limits

▾ 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

▾ AUTO SCALING

Launch Configurations

Auto Scaling Groups

Resources

You are using the following Amazon EC2 resources in the US East (N. Virginia) region:

1 Running Instance	0 Elastic IPs
1 Volume	0 Snapshots
3 Key Pairs	0 Load Balancers
0 Placement Groups	3 Security Groups

[View AWS Trusted Advisor](#) to optimize EC2.

Hi

Create Instance

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

Launch Instance

Note: Your instances will launch in the US East (N. Virginia) region

Service Health**Service Status:**

US East (N. Virginia):
This service is operating normally

Availability Zone Status:

- us-east-1a:
Availability zone is operating normally
- us-east-1b:
Availability zone is operating normally
- us-east-1d:
Availability zone is operating normally

[Service Health Dashboard](#)**Scheduled Events****US East (N. Virginia):**

No events

Launch Instance
Connect
Actions ▾



Filter by tags and attributes or search by keyword 1 to 1 of 1

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS	Public IP
	i-fbc12e15	m3.medium	us-east-1d	● running	Initializing	None	ec2-54-87-149-98.com...	54.87.149.98

Instance: **i-fbc12e15** Public DNS: **ec2-54-87-149-98.compute-1.amazonaws.com**

Description
Status Checks
Monitoring
Tags

<p>Instance ID i-fbc12e15</p> <p>Instance state running</p> <p>Instance type m3.medium</p> <p>Private DNS ip-10-231-49-126.ec2.internal</p> <p>Private IPs 10.231.49.126</p> <p>Secondary private IPs -</p> <p>VPC ID -</p> <p>Subnet ID -</p> <p>Network interfaces -</p> <p>Source/dest. check False</p> <p>EBS-optimized False</p> <p>Root device type ebs</p> <p>Root device /dev/sda1</p> <p>Block devices /dev/sda1</p>	<p>Public DNS ec2-54-87-149-98.compute-1.amazonaws.com</p> <p>Public IP 54.87.149.98</p> <p>Elastic IP -</p> <p>Availability zone us-east-1d</p> <p>Security groups ColdFusion 11-11-AutogenByAWSMP-. view rules</p> <p>Scheduled events No scheduled events</p> <p>AMI ID ColdFusion 11 on Windows 2012 Server-5613d5bc-5778-4962-b7d2-59dd34469e31-ami-34e6125c.2 (ami-363acb5e)</p> <p>Platform windows</p> <p>IAM role -</p> <p>Key pair name cfOnAWS2014</p> <p>Owner 683830609677</p> <p>Launch time September 8, 2014 11:21:15 AM UTC-4 (less than one hour)</p> <p>Termination protection False</p> <p>Lifecycle normal</p> <p>Monitoring basic</p> <p>Alarm status None</p> <p>Kernel ID -</p> <p>RAM disk ID -</p>
---	--

Connect To Your Instance ✕

You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below:

[Download Remote Desktop File](#)

When prompted, connect to your instance using the following details:

Public DNS ec2-54-87-149-98.compute-1.amazonaws.com

User name Administrator

Password [Get Password](#)

If you need any assistance connecting to your instance, please see our [connection documentation](#).

[Close](#)

Connect To Your Instance > Get Password



Password not available yet.

Please wait at least 4 minutes after launching an instance before trying to retrieve the auto-generated password.

Note: Only Amazon Windows AMIs or custom AMIs with the `Ec2SetPassword` setting enabled in the `Config.xml` file will generate a password. Instances launched from a custom AMI without this setting use the username and password of the AMI's parent instance. See the [EC2Config Service documentation](#) for information about `EC2SetPassword`.

[Try again.](#)

Close

Connect To Your Instance > Get Password



The following Key Pair was associated with this instance when it was created.

Key Name cfOnAWS2014.pem

In order to retrieve your password you will need to specify the path of this Key Pair on your local machine:

Key Pair Path no file selected

Or you can copy and paste the contents of the Key Pair below:

Connect To Your Instance



You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below:

[Download Remote Desktop File](#)

When prompted, connect to your instance using the following details:

Public DNS	ec2-54-224-153-218.compute-1.amazonaws.com
User name	Administrator
Password	*****

If you need any assistance connecting to your instance, please see our [connection documentation](#).

[Close](#)

Remote Desktop Connection

Enter your credentials

These credentials will be used to connect to
ec2-54-224-153-218.compute-1.amazonaws.com.

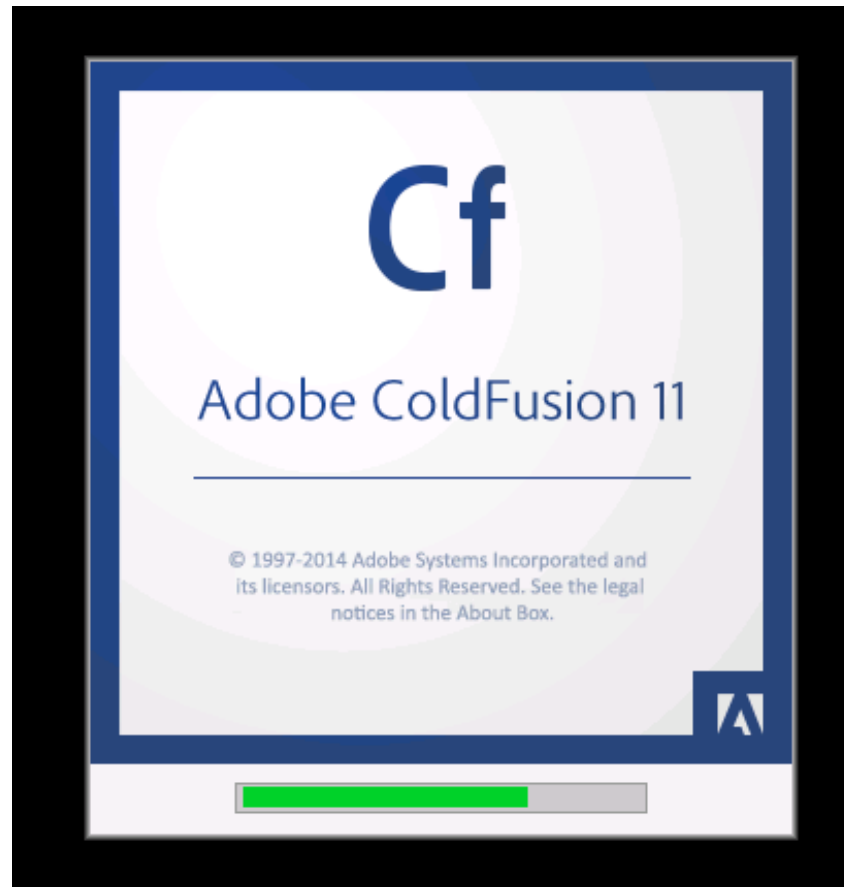
User name:

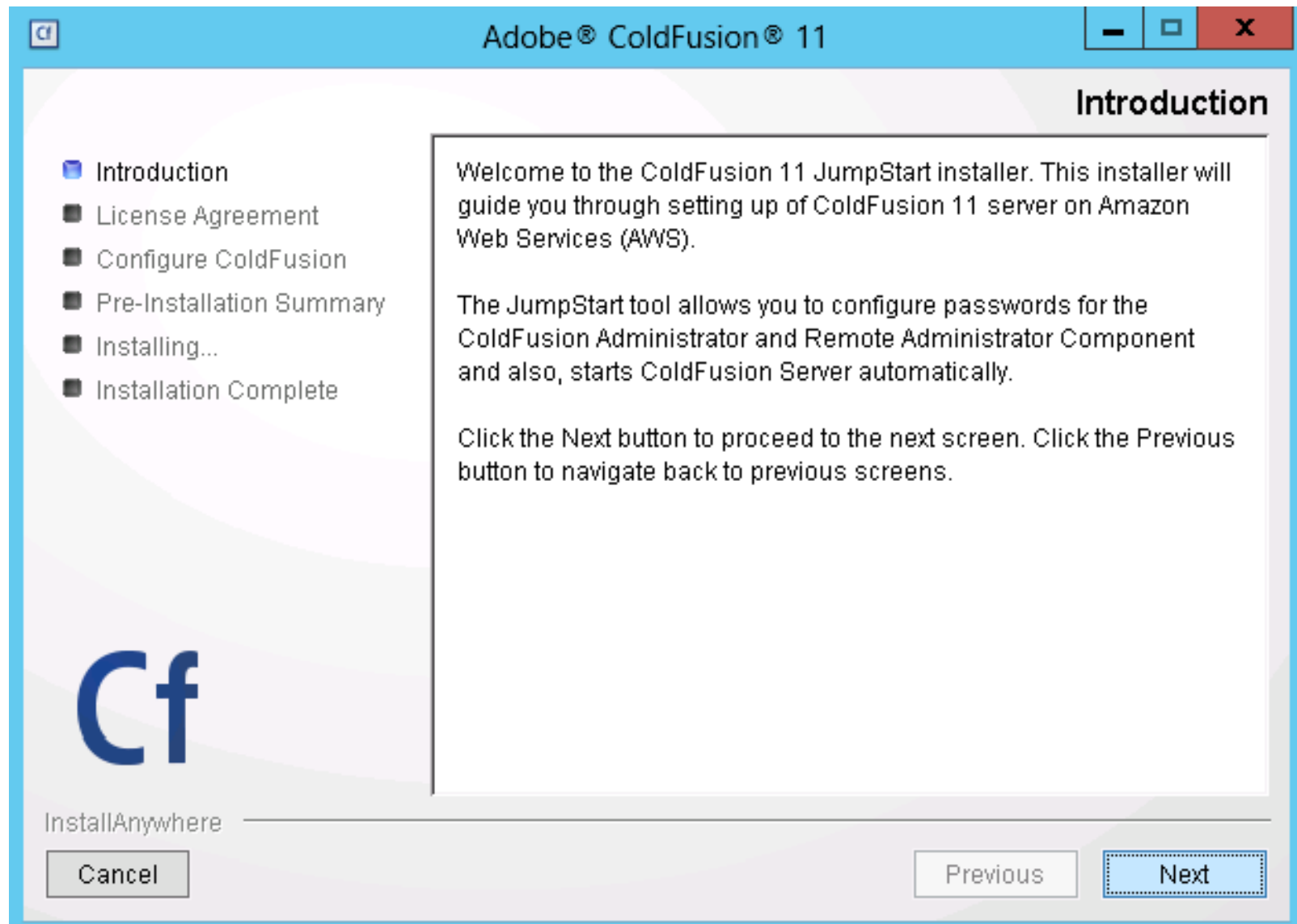
Password:

Domain:

Add user information to your keychain

The Jumpstart Tool





The screenshot shows a web browser window with the URL `http://localhost/CFIDE/admin`. The page title is "ColdFusion Administrator L...". The main content area features the Adobe ColdFusion 11 logo on the left. The title of the wizard is "Configuration and Settings Migration Wizard". The text explains that ColdFusion has been successfully installed and the wizard will guide through remaining server configuration steps and migration of settings from a previous version. It then prompts the user to enter their ColdFusion Administrator user name and password for security. Below this text are two input fields: "User name" and "Password", followed by a "Login" button.

Cf
Adobe ColdFusion 11

Configuration and Settings Migration Wizard

ColdFusion has been successfully installed. This wizard will guide you through the remaining server configuration steps and, if applicable, migrate settings from a previous version of ColdFusion.

To guarantee the security of your server, please enter your ColdFusion Administrator user name and password.

User name

Password

The screenshot shows the Windows Server Manager interface. At the top, the title bar reads "Server Manager" with standard window controls. Below the title bar is a navigation bar with "Server Manager" and "Dashboard" labels, and a menu with "Manage", "Tools", "View", and "Help". On the left is a navigation pane with "Dashboard" selected, and other options like "Local Server", "All Servers", "File and Storage Services", and "IIS".

The main content area is titled "WELCOME TO SERVER MANAGER". It features a "QUICK START" section with a numbered list of four steps: 1. Configure this local server, 2. Add roles and features, 3. Add other servers to manage, and 4. Create a server group. A "Hide" button is located at the bottom right of this section.

Below the "QUICK START" section is the "ROLES AND SERVER GROUPS" section, which includes a summary: "Roles: 2 | Server groups: 1 | Servers total: 1". It contains two columns of role information:

Role Name	Count
File and Storage Services	1
IIS	1

Each role column lists associated features: Manageability, Events, Performance, and BPA results.

You are now responsible.

You are responsible for
security.

You are responsible for
software updates.

You are responsible for
everything.

First Steps Post–Jumpstart

- Update the JRE
- Change the JVM allocation
- Shut off MySQL
- Follow the CF Lockdown Guide



Create your own AMI.

[Launch Instance](#)
[Connect](#)
[Actions](#)

Filter by tags and attributes or search by keyword

<input type="checkbox"/>	Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks
<input type="checkbox"/>		i-fbc12e15	m3.medium	us-east-		checks ...

Instance: **i-fbc12e15** Public DNS: **ec2-54-87-149-98.compu**

[Description](#)
[Status Checks](#)
[Monitoring](#)
[Tags](#)

Instance ID	i-fbc12e15
Instance state	running
Instance type	m3.medium
Private DNS	ip-10-231-49-126.ec2.internal
Private IPs	10.231.49.126
Secondary private IPs	-
VPC ID	-

Instance Management

- Launch More Like This
- Add/Edit Tags
- Change Instance Type
- Create Image
- Bundle Instance (instance store AMI)
- Change Termination Protection
- View/Change User Data
- Change Shutdown Behavior
- Get Windows Password
- Get System Log

Networking

- Change Security Groups
- Attach Network Interface

Create Image



Instance ID ⓘ i-fbc12e15

Image name ⓘ

Image description ⓘ

No reboot ⓘ

Instance Volumes

Type ⓘ	Device ⓘ	Snapshot ⓘ	Size (GiB) ⓘ	Volume Type ⓘ	IOPS ⓘ	Delete on Termination ⓘ	Encrypted ⓘ
Root	/dev/sda1	snap-67ba52b3	<input type="text" value="30"/>	Magnetic ▾	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

EC2 Dashboard

Events

Tags

▾ 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

Resources

You are using the following Amazon EC2 resources in the US East (N. Virginia) region:

1 Running Instance

1 Volume

2 Key Pairs

0 Placement Groups

0 Elastic IPs

0 Snapshots

0 Load Balancers

2 Security Groups

Create Instance

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

[Launch Instance](#)

Note: Your instances will launch in the US East (N. Virginia) region

Service Health

Service Status:

✔ US East (N. Virginia):
This service is operating normally

Availability Zone Status:

✔ us-east-1a:
Availability zone is operating normally

✔ us-east-1b:
Availability zone is operating normally

✔ us-east-1d:
Availability zone is operating normally

[Service Health Dashboard](#)

Scheduled Events

US East (N. Virginia):

No events

Create your own AMI
from scratch.

CF11 Licensing for the Cloud

- 8 cores, 16GHz per license for VM use
- 13 ECUs per CF11 Enterprise license
- m3.medium instance = 3 ECUs
- m3.large instance = 6.5 ECUs
- One license = 4 m3.medium instances
- One license = 2 m3.large instances

http://www.images.adobe.com/content/dam/Adobe/en/legal/licenses-terms/pdf/Adobe_ColdFusion-Multi-20140214_1311.pdf

Zero to Your Own CF AMI

- Create a Windows or Linux instance using a pre-existing AMI, VMware instance or using EC2 tools.
- Configure the OS, Web Server, etc.
- Install CF11
- Update CF, configure as needed
- Create an AMI

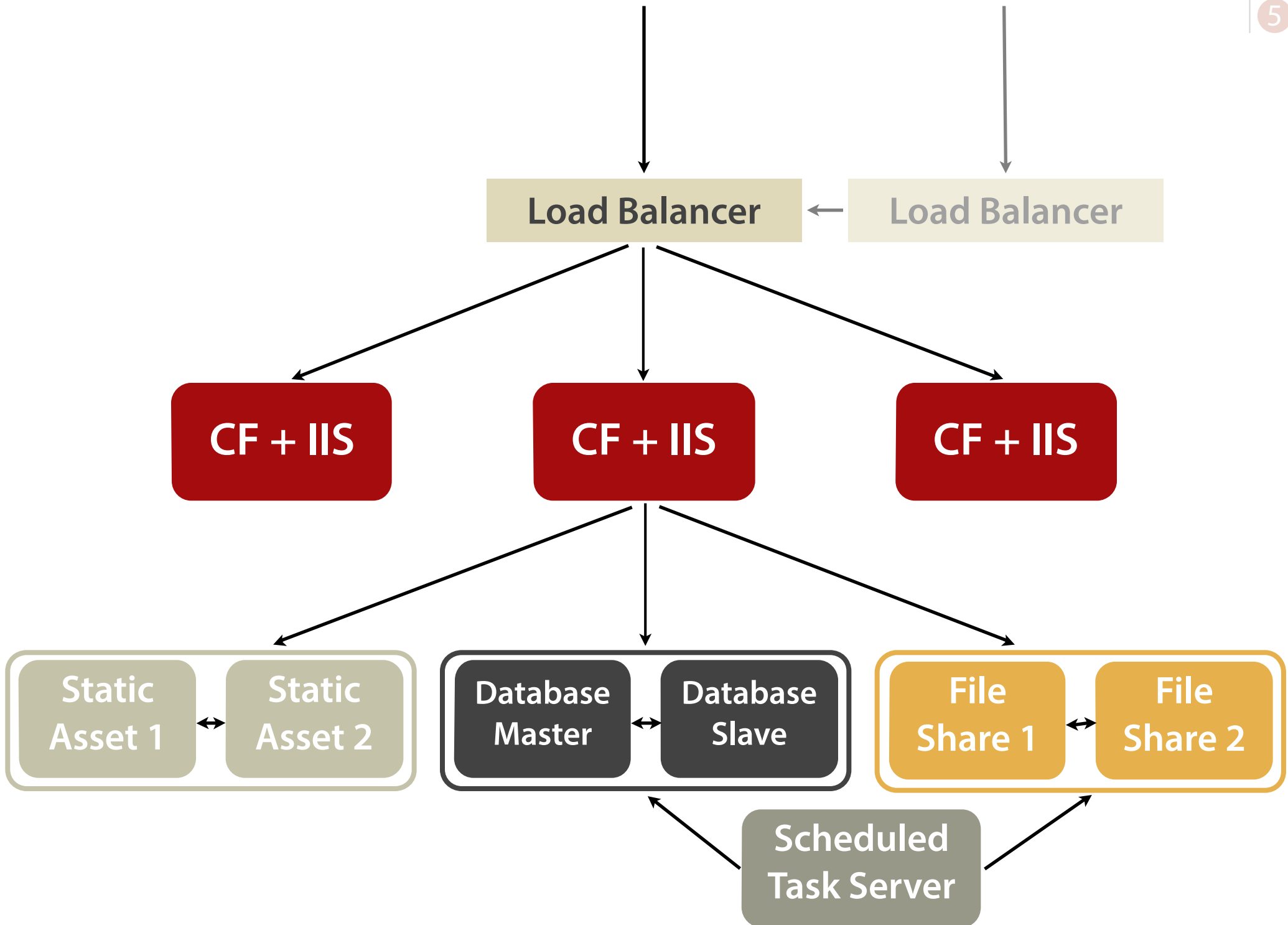
It's not hard.

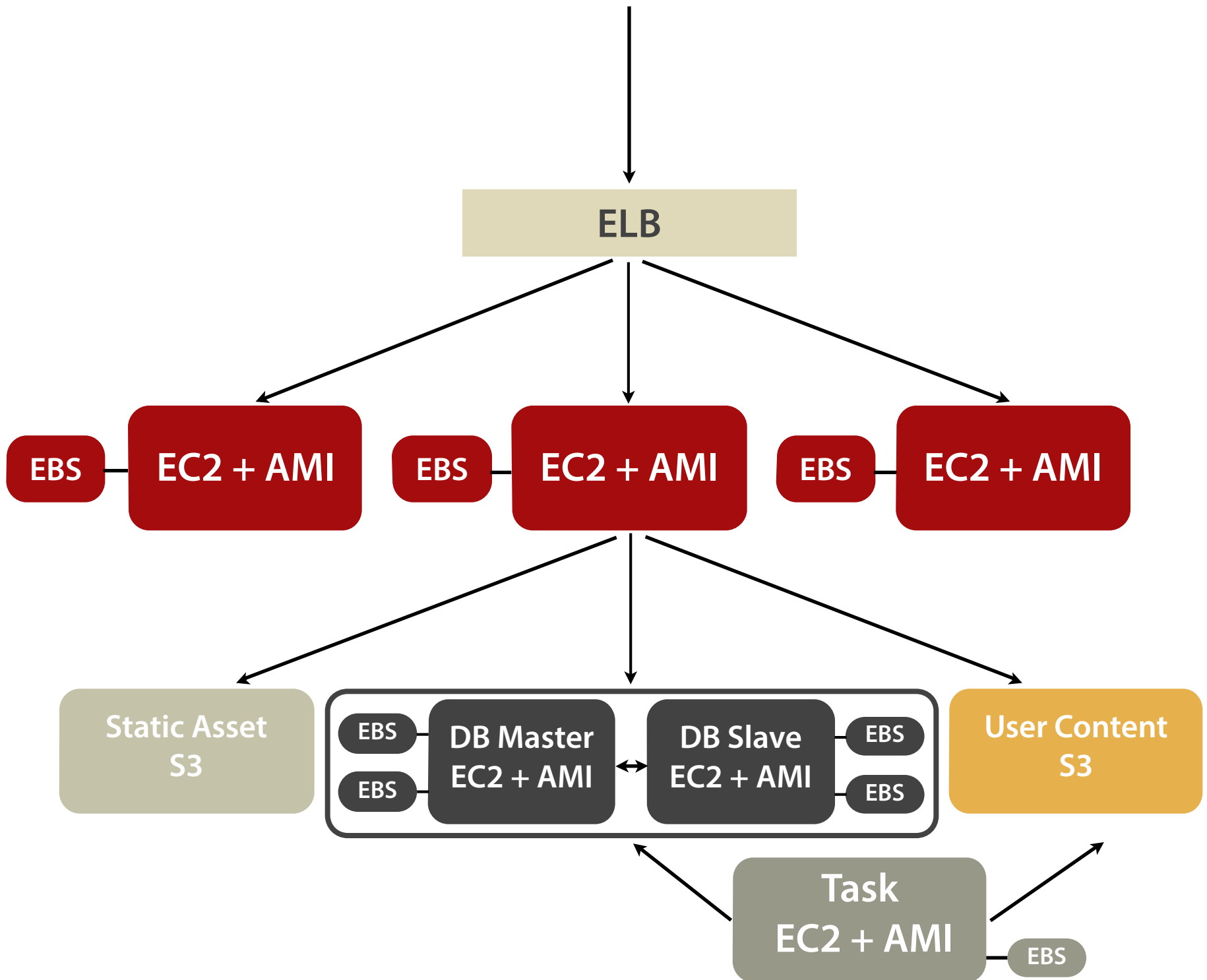
*Remember: you're the sysadmin.

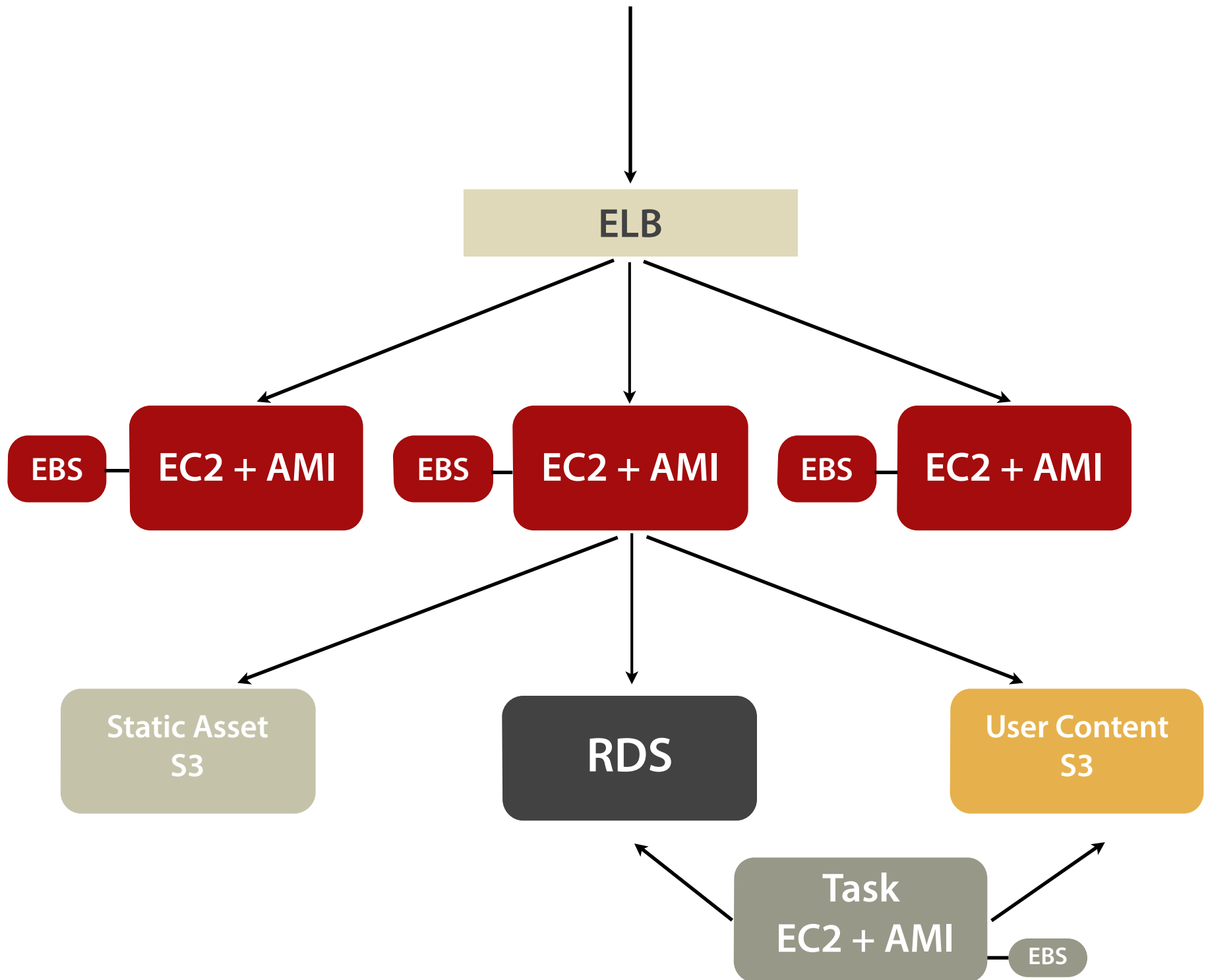
Lessons Learned Running with AWS

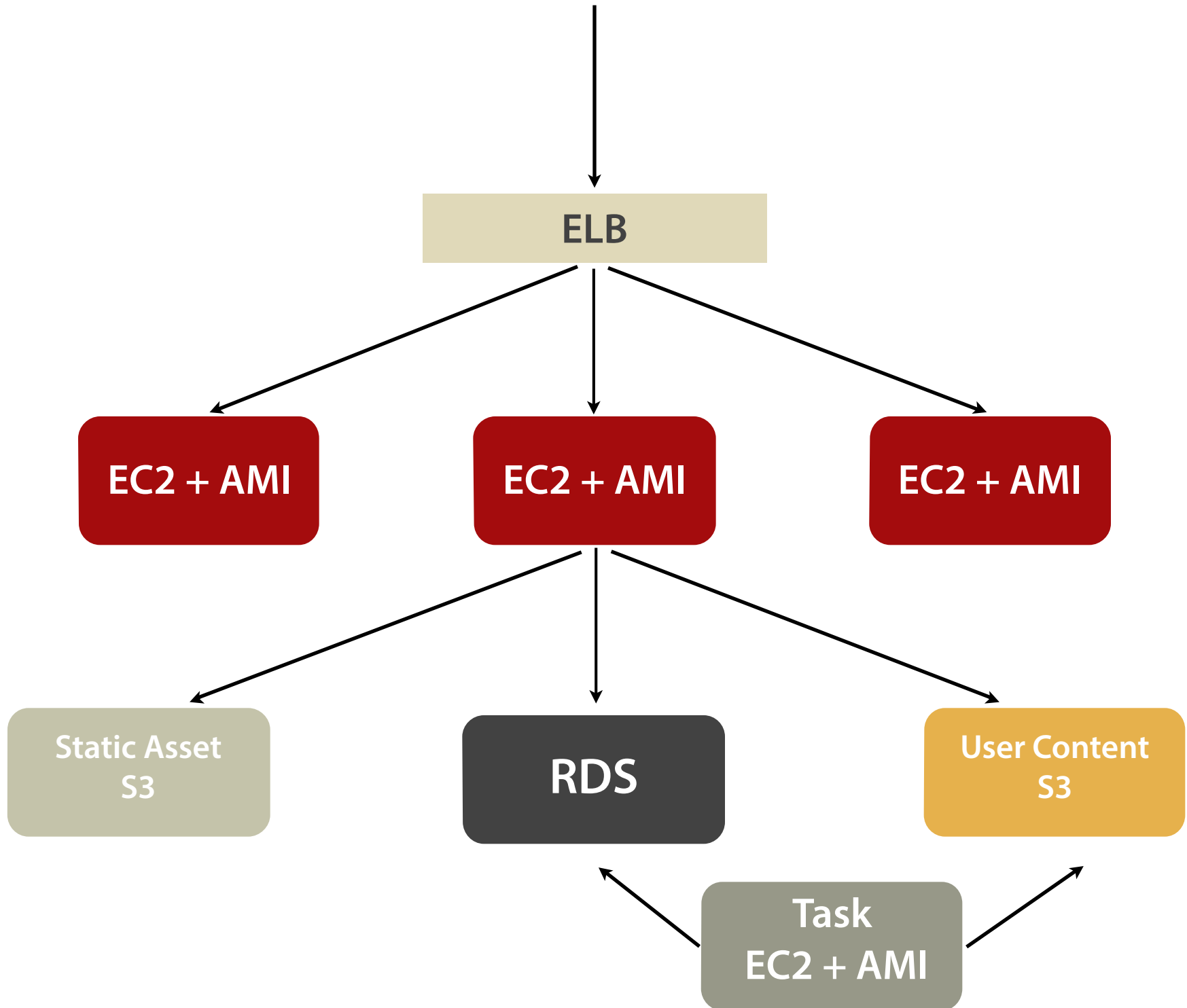
Everything fails.

You are responsible for
redundancy.









Legal and Regulatory Issues

EU data storage law \neq US data storage law

Every service incurs a charge.

<http://calculator.s3.amazonaws.com/calc5.html>

You get what you pay for.

Go Do

Thank you!

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www.iterateme.com

Resources

- Amazon AWS
aws.amazon.com
- Ben Nadel's excellent example of uploading to S3 directly from the browser:
www.bennadel.com/blog/2500-Uploading-Files-To-Amazon-S3-Using-A-Form-Post-And-ColdFusion.htm
- The CF11 AMI on AWS:
<https://aws.amazon.com/marketplace/pp/B00KXA6KAQ/> (Ubuntu)
<https://aws.amazon.com/marketplace/pp/B00KVODI4A/> (Windows)

Resources

- Tutorial on Deploying a CF WAR to Elastic Beanstalk
quetwo.com/tag/elastic-beanstalk/
- Setting up the Adobe CF10 AMI Walkthrough
www.adobe.com/devnet/coldfusion/articles/coldfusion-cloud-aws.html
- Ports needed by CF10 for cloud deployment
helpx.adobe.com/coldfusion/release-note/coldfusion-10-cloud.html
- How to select the right instances for databases on AWS
<http://www.brentozar.com/archive/2014/06/sizing-sql-server-aws/>

Resources

- Amazon's complete walkthrough of setting up instances and then a load-balanced cluster in EC2
Windows – docs.aws.amazon.com/gettingstarted/latest/computebasics/web-app-hosting-intro.html
Linux – docs.aws.amazon.com/gettingstarted/latest/computebasics-linux/web-app-hosting-intro.html
- Setting Up EC2 Security Groups
docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-network-security.html

Resources

- Wharton's Chef recipes for installing CF10
github.com/wharton/chef-coldfusion10
- EC2 Instance and Pricing Comparator
www.ec2instances.info