

1.1 Sign up for Rightscale

Go to <http://www.rightscale.com/>



Click on the Try It button:




* First name:	* Last name:
<input type="text" value="Leons"/>	<input type="text" value="Petrazickis"/>
* Email Address:	* Company:
<input type="text" value="leopetraz@gmail.com"/>	<input type="text" value="IBM Canada"/>
Job Title:	No. of Employees:
<input type="text"/>	<input type="text"/>
What is your current budget for cloud projects?	What is the current stage of your cloud computing project?
<input type="text"/>	<input type="text"/>
What is your primary server Operating System?	<input checked="" type="checkbox"/> I have read and agree to the terms and conditions .
<input type="text"/>	<input type="checkbox"/> Please email me RightScale specials and the newsletter.
<input type="button" value="Continue"/>	

Enter your new account details:

Choose a password:

Create Your Password

Choose a password and enter it in the space provided. The bar to the right gives an indication of how strong your password and then press the SAVE CHANGES button to continue.

Password:	<input type="password" value="••••••••"/>	Password strength: Medium 
Confirm password:	<input type="password" value="••••••••"/>	

Tips for creating a strong password

- Use both lowercase and capital letters
- Include numbers
- Use punctuation marks and symbols such as "_" or "~"
- Avoid using repeating characters such as "aaabbccc"
- Avoid using simple sequences such as "12345" or "abcdef"
- Make it at least 6 characters or longer

Don't do anything at this step for now. Just leave the page open.

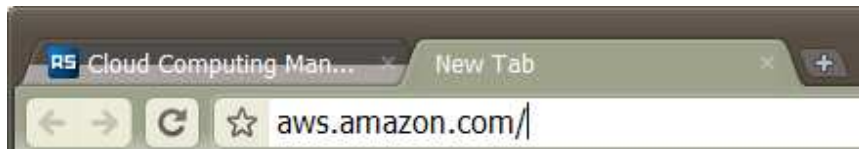
1. I have an AWS account

Obtain a RightScale Developer Account with access to all the pre-configured trial deployments and RightScale's more advanced features using your own AWS account and credentials. (Please make sure you have signed up for the Amazon Elastic Compute Cloud.) Press the ENTER CREDENTIALS button to continue. You will be automatically upgraded to a Developer plan! There is no charge for using the RightScale Platform, however you accept responsibility for all charges levied by AWS.

1.2 Create an Amazon Web Services (AWS) Account

This will require a credit card. If you are not comfortable with this, please skip to **step 1.4** instead.

Open a new tab in your browser and go to <http://aws.amazon.com>



Click on Sign Up Now:



Enter your email address and state that you are a new user:

My e-mail address is:

I am a new user.

**I am a returning user
and my password is:**

Enter your account details:

Registration

New to Amazon.com? Register Below.

My name is:

My e-mail address is:

Type it again:

Protect your information with a password

This will be your only Amazon.com password.

Enter a new password:

Type it again:

And some more account details:

Contact Information

* required fields

Full Name:

Address Line 1*:

Street address, P.O. box, company name, c/o

Address Line 2:

Apartment, suite, unit, building, floor, etc.

City*:

State, Province or Region*:

ZIP or Postal Code*:

Country*:

Phone number*:

Company or Web Site Name:

Web Site URL:

Accept their agreement:

AWS Customer Agreement

[Printer Friendly Version](#)

Amazon Web Services™ Customer Agreement

Updated October 30, 2009

PLEASE NOTE, TERMS AND CONDITIONS GOVERNING USE OF THE AMAZON ASSOCIATES WEB SERVICE™ ARE NOW LOCATED AT: <http://affiliate-program.amazon.com/gp/advertising/api/detail/agreement.html>

Check here to indicate that you have read and agree to the terms of the Amazon Web Services Customer Agreement.

Security Check

Image:

[Try a different image](#)



[Why do we ask you to type these characters?](#)

Type the characters in the above image*:

[Having Trouble? Contact us.](#)

[Continue](#)

Click on Amazon Elastic Compute Cloud (EC2):

Thank You
You Have Created an Amazon Web Services Account

We have e-mailed you a confirmation and information about your new account.

Explore Other Amazon Web Services

- [Amazon Mechanical Turk: Register at the Amazon Mechanical Turk Requester web site to use the Amazon Mechanical Turk web service](#)
- [Amazon CloudFront](#)
- [Amazon Elastic Compute Cloud](#)
- [Amazon Elastic MapReduce](#)

Click on Sign Up for EC2:



Enter your credit card info:

Credit Card	Credit Card Number	Expiration Date		Cardholder's Name
Visa <input type="button" value="v"/>	<input type="text"/>	01 <input type="button" value="v"/>	2009 <input type="button" value="v"/>	<input type="text"/>

Choose the billing address:

Leo McCloud
[REDACTED]
Toronto Ontario, [REDACTED]
Canada
Phone: [REDACTED]

Confirm your telephone number

1. Provide a telephone number

Phone me in the next few minutes at the following phone number:

Country Code: Phone number:
 ext:

Enter your PIN when they call you:

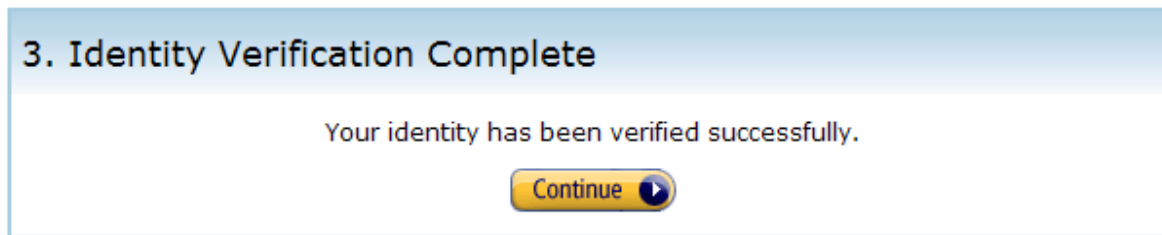
2. Call in progress

Please follow the instructions on the telephone and key in the following Personal Identification Number (PIN) on your telephone when prompted.

Your PIN: 7500

If you have not yet received a call at the number indicated above, please wait. This page will automatically update with what you need to do next.

It worked:



Complete the sign up:



1.3 Generate keys and certificates

Go into the resource center:

- Resource Center

Browse the resource center for code samples, documentation, release notes, and more information to help you build innovative applications. Subscribe to RSS feeds or set up e-mail watches to be alerted of the latest developments for this service.

Go to the Security Credentials for your account:



Take note of your **access number**:



Take note of your **access key**:

Your Access Keys

Created	Access Key ID	Secret Access Key	Status
November 3, 2009	[Redacted]	Show	Active (Make Inactive)

[Create a New access Key](#)

Take note of your **secret access key**:

Your Access Keys

Created	Access Key ID	Secret Access Key	Status
November 3, 2009	[REDACTED]	Show	Active (Make Inactive)

[Create a New access Key](#)

Secret Access Key ✕

[REDACTED]

Switch to the X.509 Certificates tab:

Access Keys

X.509 Certificates

Access Key ID
Your Access Key ID identifies you as the party responsible for service requests. Use your Access Key ID as the value of the `AWSAccessKeyId` parameter in requests you send to Amazon Web Services (when required).

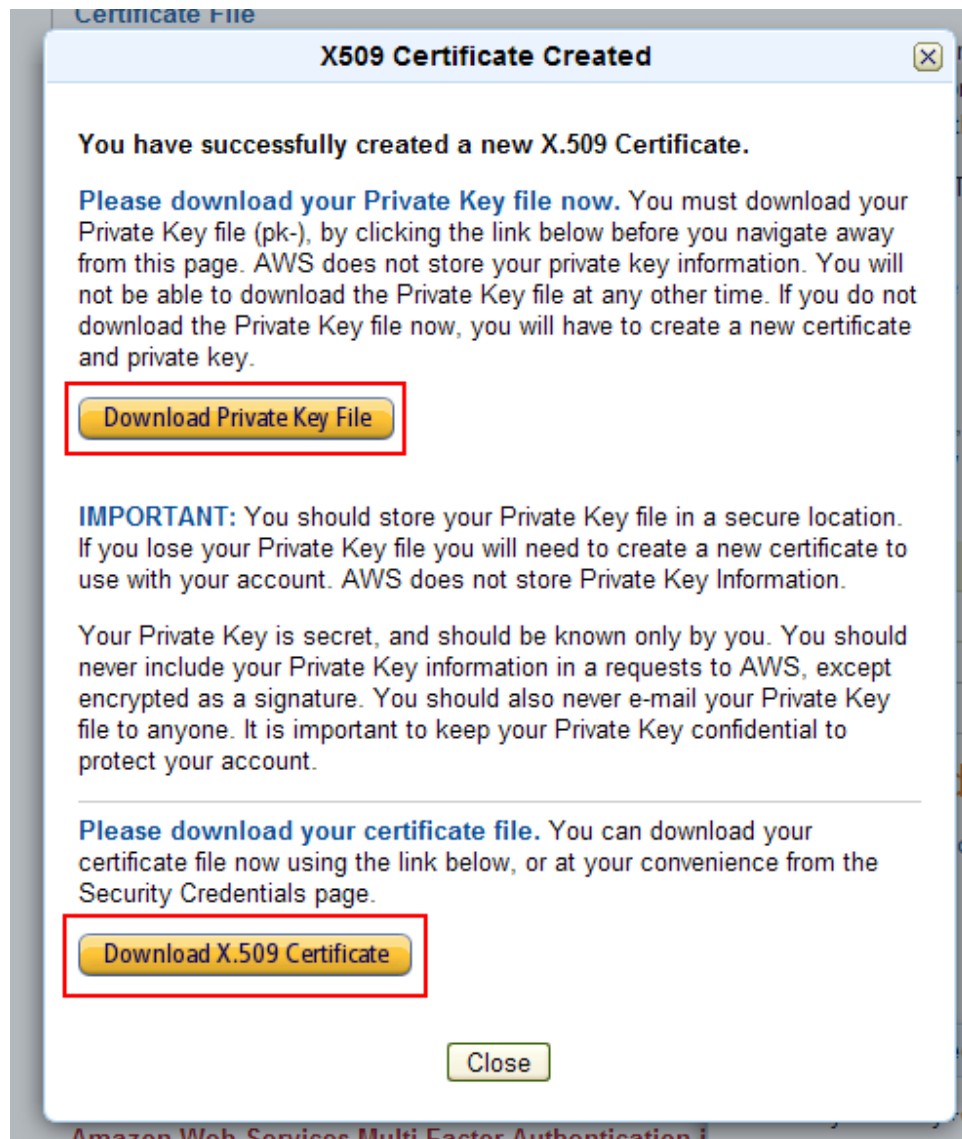
Secret Access Key
Each Access Key ID has a Secret Access Key associated with it. Use your Secret Access Key to calculate a signature to include in requests to web services that require authenticated requests. Your Secret Access Key is a secret, and should be known only by you and AWS. You should never include your Secret Access Key in your requests to AWS. You should never e-mail your Secret Access Key to anyone. It is important to keep your Secret Access Key confidential to protect your account.

Create a new certificate:

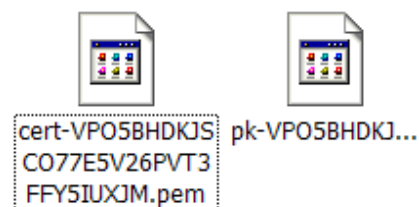
Your Certificates
You may have up to two certificates associated with your account at any time, which will enable seamless migration of your applications from an old certificate to a new certificate. To create a new certificate, change the status of an existing one to 'Inactive' and delete that certificate.

Created	X.509 Certificate	Status
Create a New Certificate Upload Your Own Certificate		

Download both the **private key** and the **X.509 certificate**:



Take a note of where they are on your hard drive:



1.4 Use the instructor's AWS account (Optional)

If you were uncomfortable with registering for AWS, you can optionally use my credentials instead. They will work through until the end of the workshop.

Account number:

2772-2146-6967

Access key:

AKIAIIANWKFFFEZZFBDA

Secret access key:

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

Private key:

-----BEGIN PRIVATE KEY-----

MIIcdQIBADANBgkqhkiG9w0BAQEFAASCAl8wggJbAgEAAoGBAKyjmdNA7X7t9za8ZADSH1n5HPot

P4Z//2xgJqWI93zFXfYOAqMouH7EPs3IOTadgOi0vWS81dR6rLLSEV1/kSpl8pN1/j5N7noLTOa8

60hU4M3G67sLuDxNX/f1GI5/tkDgT8Tuu7uWXmHt0VILWscAS+XASJQhyqbeDF+0RGCTAgMBAAEC

gYAP0YnFvpxEVh+hx09Od/Jhdx79APHiLBZGYuUHo+4xY5BBfHUnaBLHosmyaf99Dp+CMxVrhpX9

OyRZ2j+3FnpBg/ldEy2RnF48Q7oSeYos4oU/Hjl/SsmKo5/j6btfqBGr4S6X8oCr7UJbQjss82Zd

62zFoXNsn5REUAXYXmt5EQJBAOW9tYzNSEOheRhGgkr7NB3feJP40ZCizvuwh06ykNHXLJiKhnb1

83G2khIRUcxrCqRyOHK8J3c1lkRDkErDrokCQQDAXxfloSk40tMtN9+vfgiR+ca9sT59ghGtN+4

YGPDC4uySRi8Njl1r2u1BQuEwLMztHUI8R22m+Pz1gljIC87AkAotaYfDh05Brrrh0r9OGgyxu+Z

4ORZqc/dn5IKY6/vzx4y5ZEqMWLzCnP3EobZHziy7ffeHMaO14qTQ/W09pAkAkcR4etcxl7CH0

mwMHohckD1jxW7P+4iO5OUR0ShY7+bDyCjTcWq1R5PRTa2w+Lr8D2XijwmRtlmR9aZooC03HAKB2

OdyZj9ftY7faUrvJXsAps4uwac8ToKVW8n8Euyo9SyddXrtMZ2D8JDJ3MlevJDFZkdMQpVzjWJ2d

XPymOnfV

-----END PRIVATE KEY-----

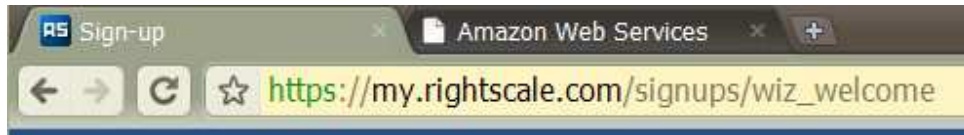
X.509 Certificate:

```
-----BEGIN CERTIFICATE-----  
MIICeDCCAeGgAwIBAgIGAJo4EST/MA0GCSqGSIb3DQEBBQUAMFMxCzAJBgNVBAYT  
A1VTMRMwEQYDVQQKEwpBbWF6b24uY29tMQwwCgYDVQQLEwNBV1MxITAfBgNVBAMT  
GEFXUyBMaw1pdGVkLUFzc3VyYW5jZSBDQTAeFw0wOTExMDMyMDI1NDFaFw0xMDEx  
MDMyMDI1NDFaMFMxCzAJBgNVBAYTA1VTMRMwEQYDVQQKEwpBbWF6b24uY29tMRcw  
FQYDVQQLEw5BV1MtRGV2ZWxvcGVycyEwMBQGA1UEAxMNMWNoJ4dWRsZm9peTCB  
nzANBgkqhkiG9w0BAQEFAAOBjQAwGyKCGYEArcK0Z0DtFu33NrxkANIfwfk860/  
hn//bGAmpYj3fMVd9g4Coyi4fsQ+zeU5Np2A6LS9ZLzV1HqsstIRXX+Rkkjyk3X+  
Pk3uegtM5rZrSFTgzcbruwu4PE1f9/UYjn+2Q0BPx067u5ZeYe3RUgtaxwBL5cBI  
lCHKpt4MX7REYJMCAwEAAaNXMFUwDgYDVR0PAAQH/BAQDAgwgMBYGA1UdJQEB/wQM  
MAoGCCsGAQUFBwMCAwGA1UdEwEB/wQCMAAwHQYDVR0OBBYEFGwcnWlSTeUK/sSP  
W949IvvBK50tMA0GCSqGSIb3DQEBBQUAA4GBAC+0n3ABeImXubo0m4Ly7b4sNjNW  
A1JJJeQuHMEw2GEDXaJGaWrVUwa0gX8+oeLkXnaFWCvJU90JR6YbWA12kBo/txGsQ  
nvggCHlIiEjJ+YvwO2SIgzh4kFDwpUmm0441J+14R2SWKsqHO/H48fx601uX+9Yt  
0BA4ek/v7F0isnG4  
-----END CERTIFICATE-----
```

I will disable these credentials after the workshop is over and delete any running instances.

1.5 Finish signing up for Rightscale

Go back to the RightScale tab:



Click on Enter Credentials:

1. I have an AWS account

Obtain a RightScale Developer Account with access to all the pre-configured trial deployments and RightScale's more advanced features using your own AWS account and credentials. (Please make sure you have signed up for the Amazon Elastic Compute Cloud.) Press the ENTER CREDENTIALS button to continue. You will be automatically upgraded to a Developer plan! There is no charge for using the RightScale Platform, however you accept responsibility for all charges levied by AWS.

Enter your credentials:

Amazon AWS Account Number:	<input type="text"/>
Amazon AWS Access Key ID:	<input type="text"/>
Amazon AWS Secret Access Key:	<input type="text"/>
	<input type="button" value="Access My Account"/>

Create a new SSH key pair:

SSH Key Setup

In order to access instances that you launch, they must be associated with an AWS SSH Key Pair. RightScale must have access to the private key to provide access through the online SSH Console. You can create a new Key Pair now. Alternatively you can enter the private key of one of your existing SSH key pairs into RightScale.

RightScale can create a new SSH Key Pair for you in your AWS account:

Create a new SSH Key Pair

You just want the dashboard:

Select a Trial

Your Amazon credentials were accepted.

You're ready to get started with your RightScale Developer Account. You can launch one of our pre-configured deployment and launch your own application on the cloud. Each deployment includes a RightScale ServerTemplate with all the required components. Please select one:

- Lamp application - A fully functioning LAMP (Linux Apache MySQL and PHP) all-in-one application server.
- Rails application - A Ruby on Rails (RoR) all-in-one application server.
- Trac application - Trac is an open source wiki and issue tracking system for software development projects.
- Wordpress application - Wordpress is an open source blog publishing application.
- Just the rightscale dashboard, please

When you are ready, press the RUN button at the bottom of the page. This will start a macro running in a separate window application and will take you to the deployment screen in RightScale. From there you can make changes to the configuration deployment.

If you elect to go straight to the RightScale dashboard you will be able to configure all aspects of your own deployment. In RightScale, we recommend that you read the [tutorial sections](#) of the RightScale Wiki.

Make the giant help pane go away if you like:



2.1 Start using Rightscale

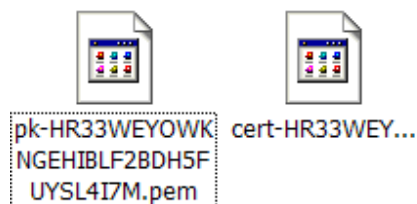
Go to Clouds > AWS Global > Credentials:



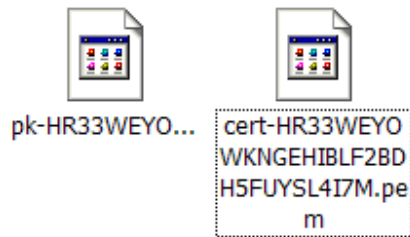
Click Edit:



Open the private key file in a text editor (e.g. Notepad):



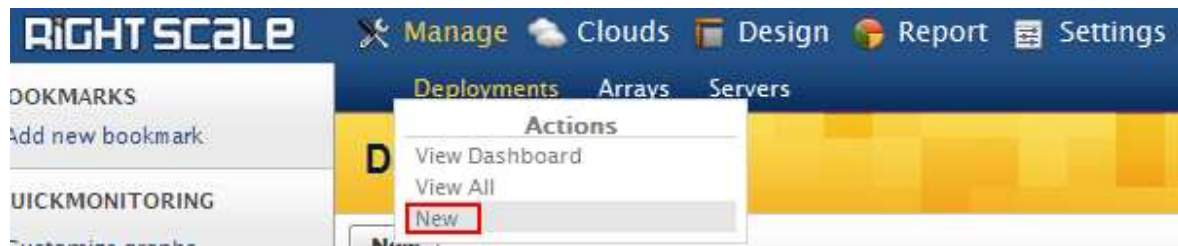
Open the certificate file in a text editor (e.g Notepad):



Paste in the private key and certificate values:



Go to Manage > Deployments > New:



Call it something relevant and Save:

New Deployment

Nickname:

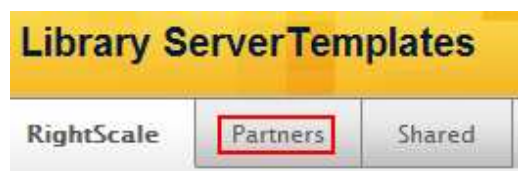
Description:

Default Availability Zone:

We need some Server Templates before we can add any Servers. Go to Design >ServerTemplates > Library:



Go to Partners:



Search for DB2:



Import the Ubuntu-based template:

Library ServerTemplates Help

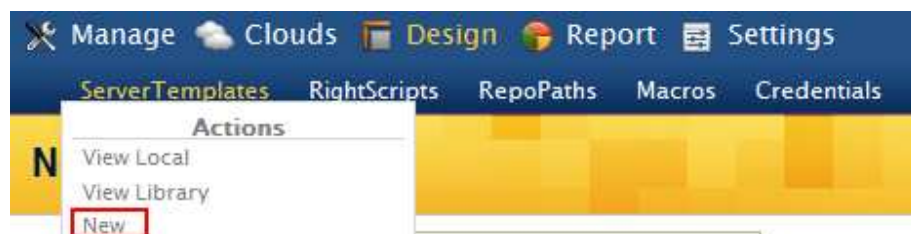
RightScale **Partners** Shared

Filter by Name Results 1 - 2 of 2 LibraryObjects

Name	Clouds	Publisher	Revision	Commit Message	Updated At	Actions
IBM DB2 Express-C 9.7 (CentOS 5.2)	aws	IBM	[rev 13]	fixed description	2009-10-27 21:13:24	import
IBM DB2 Express-C 9.7 (Ubuntu 8.04) v1	aws	IBM	[rev 2]	removed premium script	2009-10-29 08:29:25	import

◀ ◁ - 1/1 - ▷ ▶

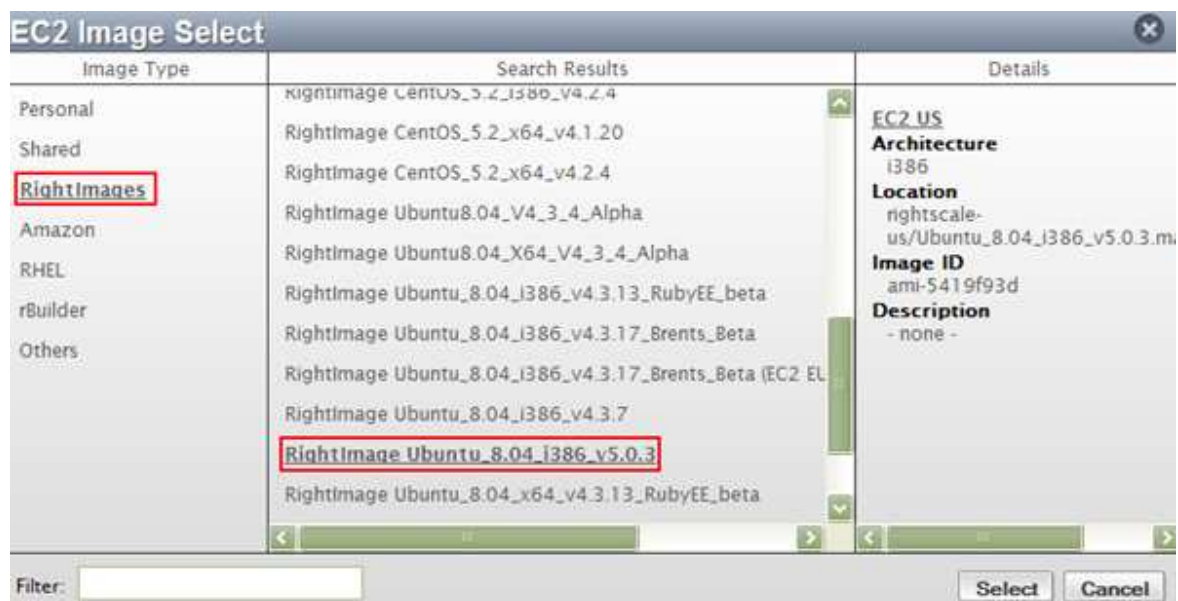
Let's create web server template for running MediaWiki. Go to Design > ServerTemplates > New:



Choose a base image:

EC2 Image:

Select the Ubuntu RightImage:



Name it and save:

New Server Template

✓ Logged in successfully

Nickname:

Description:

Cloud Type:

Instance type:

EC2 Image:

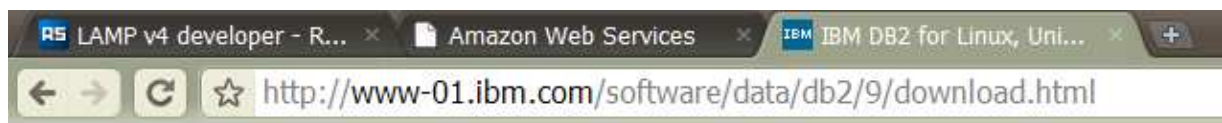
User data:

2.2 Customize your Rightscale deployment

2.2.1 Create a RightScript for installing the PHP extension

You'll need the PHP extension for DB2. It's pretty easy to get, but you'll need DB2 headers to install it. Those come with either DB2 (such as the free DB2 Express-C edition) or with the IBM Data Server Driver for ODBC and CLI.

Go to <http://www.ibm.com/db2/9/download.html>



Click on Data Server Client Packages:

→ [Data Server Client Packages](#)


Download IBM Data Server Packages, including client tools, runtime client and the latest drivers for JDBC and SQLJ, ODBC and CLI, and add-ins for Visual Studio.

Click on IBM Data Server Driver for ODBC and CLI:

Content

Package	Description
IBM Data Server Driver Package (DS Driver)	This package contains drivers and libraries for various programming language environments. It provides support for Java (JDBC and SQLJ), C/C++ (ODBC and CLI), .NET drivers and database drivers for open source languages like PHP and Ruby. It also includes an interactive client tool called CLPPlus that is capable of executing SQL statements, scripts and can generate custom reports.
IBM Data Server Driver for JDBC and SQLJ (JCC Driver)	Provides support for JDBC and SQLJ for client applications developed in Java. Supports JDBC 3 and JDBC 4 standard. Also called as JCC driver.
IBM Data Server Driver for ODBC and CLI (CLI Driver)	This is the smallest of all the client packages and provides support for Open Database Connectivity (ODBC) and Call Level Interface (CLI) libraries for the C/C++ client applications.

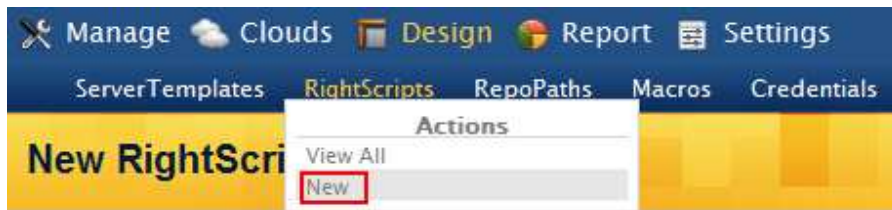
Grab the "Linux 32-bit AMD and x86" one:

 IBM Data Server Driver for ODBC and CLI (Linux 32-bit AMD and Intel x86) Version 9.7	Linux for System x 86Series	download
Languages: English		

After a few steps, you'll have it on your hard drive:



Go to Design > RightScripts > New:



Here's the script:

```
#!/bin/bash
echo "Installing packages"
apt-get update && apt-get -y install libstdc++5 libaio1 php-pear php5-dev
php5 libapache2-mod-php5

TAR1=${ATTACH_DIR}/v9.7_linuxia32_odbc_cli.tar.gz
TAR2=${ATTACH_DIR}/ibm_data_server_driver_for_odbc_cli_32_linuxia32_v97.tar.g
z

echo "Unzipping"
if [ -f ${TAR1} ]; then
    tar --index-file /tmp/odbc_cli.tar.log -xvzf ${TAR1} -C /tmp/
elif [ -f ${TAR2} ]; then
    tar --index-file /tmp/odbc_cli.tar.log -xvzf ${TAR2} -C /tmp/
else
    echo "File not found"
fi
echo "Deploying unzipped DB2 libraries"
cd /tmp
cp -ru odbc_cli/clidriver/* /usr

echo "Installing php extension"
pecl install ibm_db2 << COMMANDS
1
/usr

COMMANDS
echo "Updating php.ini"
echo "extension=ibm_db2.so" >> /etc/php5/apache2/php.ini

echo "Restarting the web server"
/etc/init.d/apache2 restart

exit 0
```

The script installs several Ubuntu Linux packages using apt-get, deploys the Data Server Client for ODBC libraries, and then installs the IBM DB2 extension for PHP from the PECL repository.

Enter an appropriate name and paste in the script:

New RightScript

Name:

Description:

Packages:

Inputs:

Script:

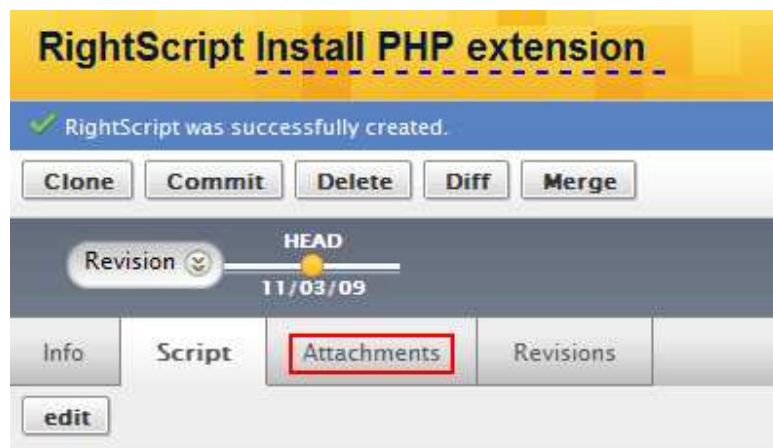
```

COMMANDS
echo "Updating php.ini"
echo "extension=ibm_db2.so" >> /etc/php5/apache2/php.ini

echo "Restarting the web server"
/etc/init.d/apache2 restart

exit 0
    
```

Click on the Attachments tab:

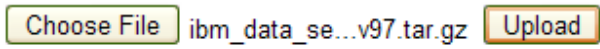


Attach the IBM Data Server Driver for ODBC and CLI:

[ibm_data_server_driver_for_odbc_cli_32_linuxia32_v97.tar.gz](#)

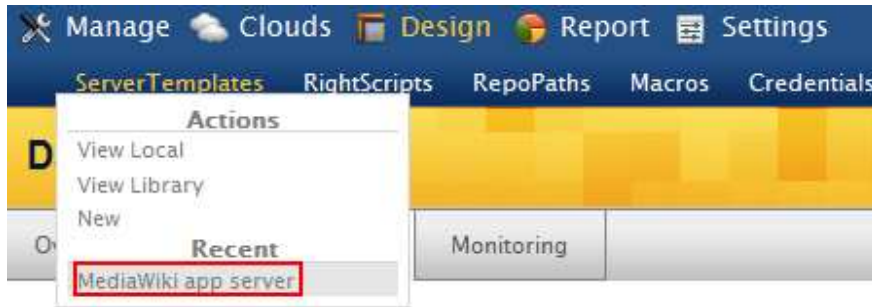
Upload it:

Upload file to folder



Now we can add it to our MediaWiki server image as a boot script.

Go to Design > ServerTemplates > MediaWiki app server:



Click on the Scripts tab:



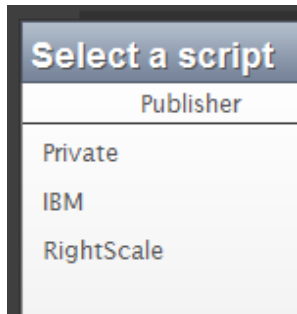
Add a boot script:

Boot Scripts

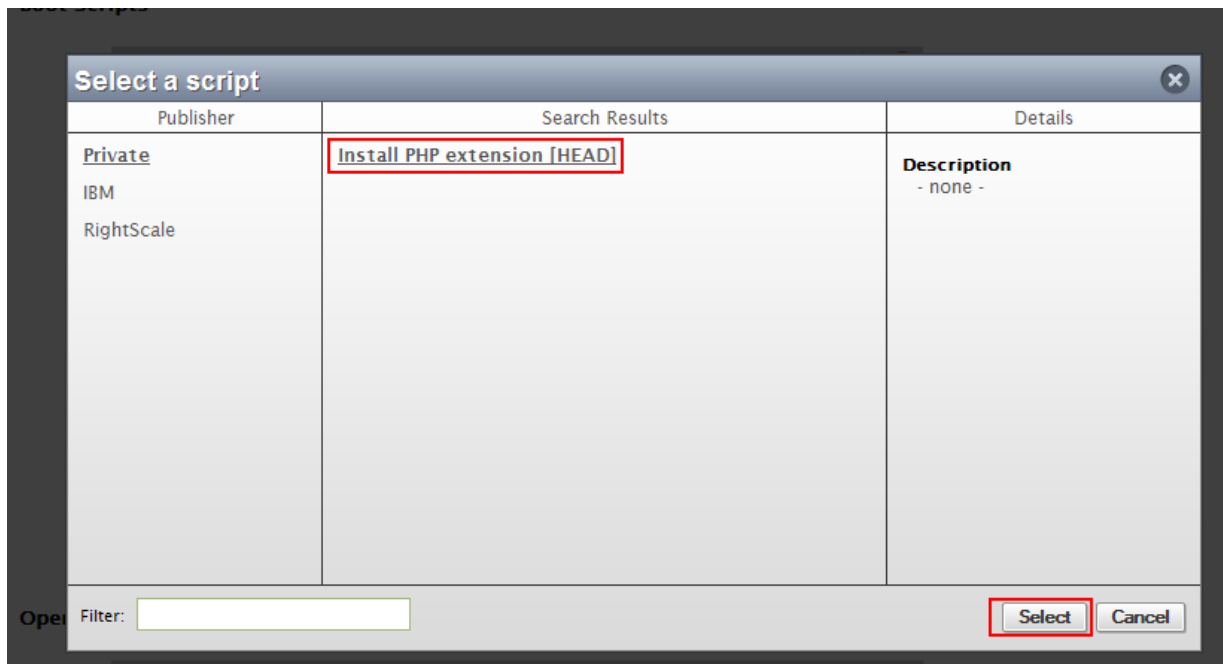
-- No RightScripts added --



A private one:



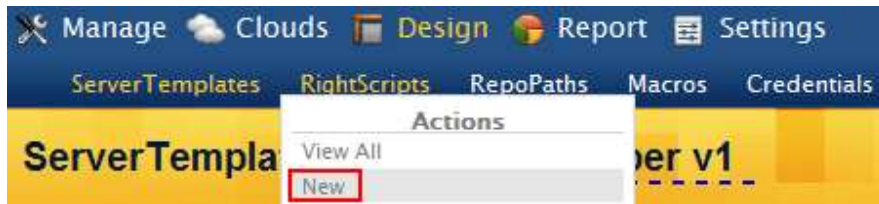
Select your PHP extension installation script:



2.2.2 Create a RightScript for deploying MediaWiki

You'll also want MediaWiki on the box. You could use SSH and SCP to manually place it after the server is up and running, but we want to script everything in the cloud. Let's write a script for deploying MediaWiki.

Create another RightScript:



Here's the script:

```
#!/bin/bash
```

```
mkdir /var/www/mediawiki -m 777
```

```
chown www-data:www-data /var/www/mediawiki
```

```
tar --index-file /tmp/MediaWiki.tar.log -xvzf ${ATTACH_DIR}/MediaWiki.tar.gz  
-C /var/www/mediawiki
```

```
exit 0
```

The script unzips the MediaWiki archive into the directory that Apache serves to the world.

Name it appropriately and paste in the code:

New RightScript

Name:

Description:

Packages:

Inputs:

Script:

```
#!/bin/bash

mkdir /var/www/mediawiki -m 777
chown www-data:www-data /var/www/mediawiki
tar --index-file /tmp/MediaWiki.tar.log -xvzf ${ATTACH_DIR}/MediaWiki.tar.gz -C
/var/www/mediawiki

exit 0
```

Let's grab the archive that the script relies on. MediaWiki is always distributed as a gzipped tar archive, but the forthcoming 1.16 release with improved DB2 support is not out yet. Let's grab a custom build:

<http://lpetr.org/mediawiki/MediaWiki.tar.gz>

Let's attach it:

RightScript Deploy MediaWiki application

✓ RightScript was successfully created.

Revision HEAD
11/03/09

And upload:

Upload file to folder

C:\Documents and Settings\ [Browse_] [Upload]

Back to our MediaWiki app server template:



Add the new RightScript following the same procedure as before:

Deploy MediaWiki application [HEAD]

2.2.3 Create a RightScript for preparing a DB2 database for MediaWiki

Before we can use the MediaWiki install wizard, we need to have a database created on our database server. Let's add a script which will do it for us automatically.

Here's the script:

```
#!/bin/bash

echo "Creating database"
su - db2inst1 -c "db2 CREATE DATABASE wikidb AUTOMATIC STORAGE YES USING
CODESET UTF-8 TERRITORY US COLLATE USING SYSTEM PAGESIZE 32768"
echo "Enable the Statement Concentrator"
su - db2inst1 -c "db2 CONNECT TO wikidb && db2 UPDATE DATABASE CONFIGURATION
USING STMT_CONC LITERALS IMMEDIATE"
echo "Restarting DB2"
su - db2inst1 -c "db2stop force"
su - db2inst1 -c "db2start"

exit 0
```

This will create a DB2 database with a 32K pagesize, rather than the default 4K pagesize. A 32K pagesize allows for more data to be placed inline in a single row. It also enables the Statement Concentrator, which optimizes repeated queries.

Create the RightScript:

New RightScript

Name:

Description:

Packages:

Inputs:

Script:

```
#!/bin/bash
echo "Creating database"
su - db2inst1 -c "db2 CREATE DATABASE wikidb AUTOMATIC STORAGE YES USING
CODESET UTF-8 TERRITORY US COLLATE USING SYSTEM PAGESIZE 32768"
echo "Enable the Statement Concentrator"
su - db2inst1 -c "db2 CONNECT TO wikidb && db2 UPDATE DATABASE CONFIGURATION
USING STMT_CONC LITERALS IMMEDIATE"
echo "Restarting DB2"
```

There are no attachments.

This script needs to be added to the DB2 template (not the MediaWiki one).

Go to the DB2 ServerTemplate:

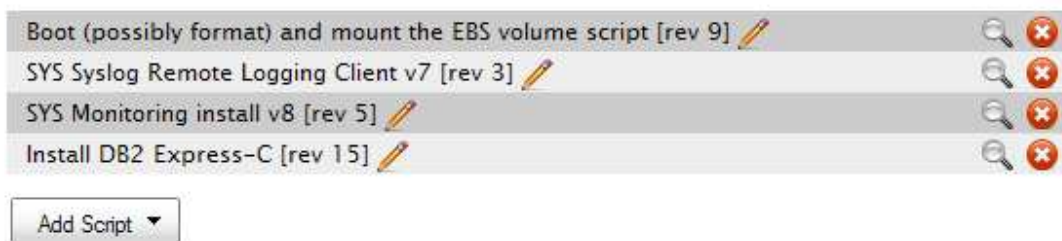


Clone it so you can change the scripts:

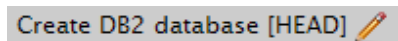


Add the script you've just created:

Boot Scripts



Good:



2.3 Add servers to your deployment

Go back to the deployment you created earlier via Manage > Deployments > Dashboard:



Click on the one you created:

Deployments Budget Estimate	
Deployment	Current Runrate*
Default	-
MediaWiki and DB2 Workshop	-

Add a server:

Deployment MediaWiki and DB2 Workshop Unlocked [Lock]

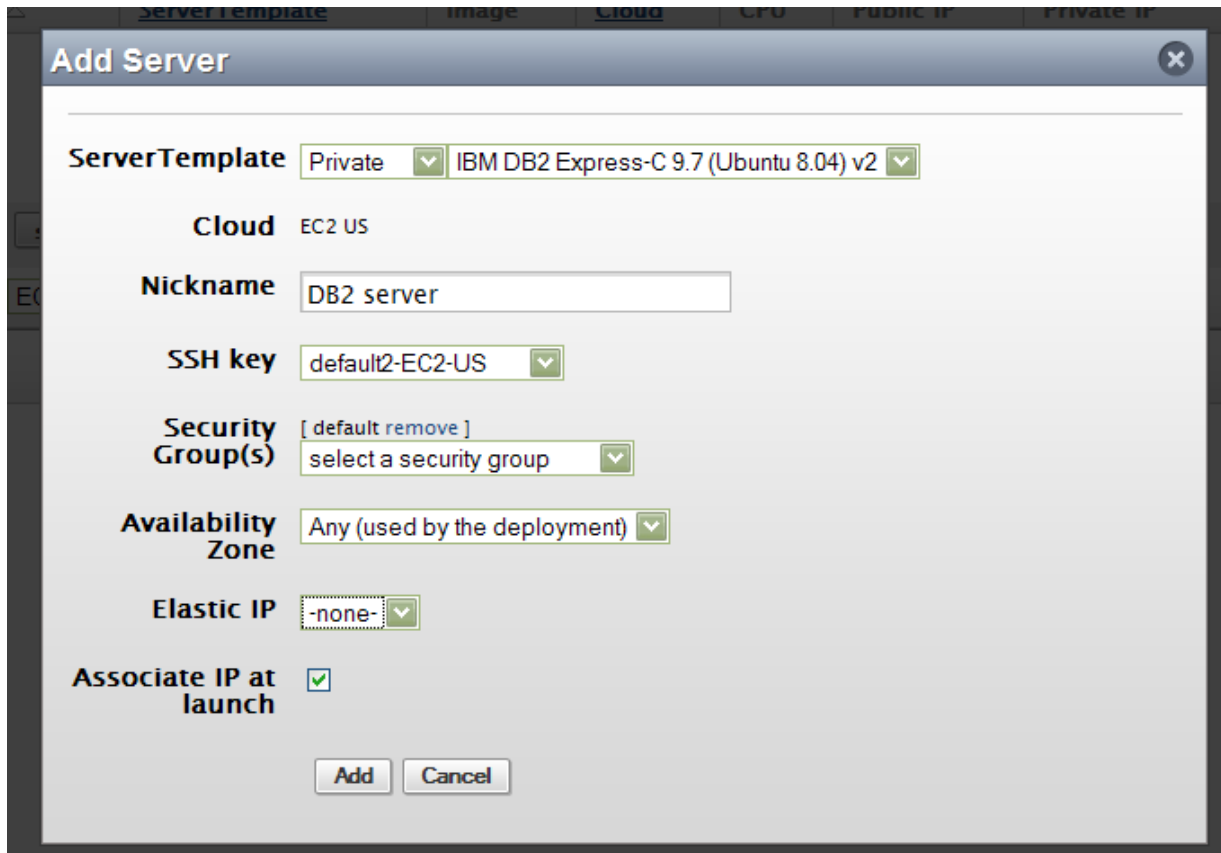
Filter by

Deployment is unlocked (Locking prevents deletion of servers)
 Current Runrate usage: \$0.00/hour (\$0.00/day)

Nickname △	ServerTemplate	Image	Cloud	CPU	Public IP	Private IP
- No Servers -						

Select Cloud:

Add a DB2 server and place it in the default security group:



Add a MediaWiki server in the default security group:

Add Server

ServerTemplate Private MediaWiki app server

Cloud EC2 US

Nickname MediaWiki app server

SSH key default2-EC2-US

Security Group(s) [default remove] select a security group

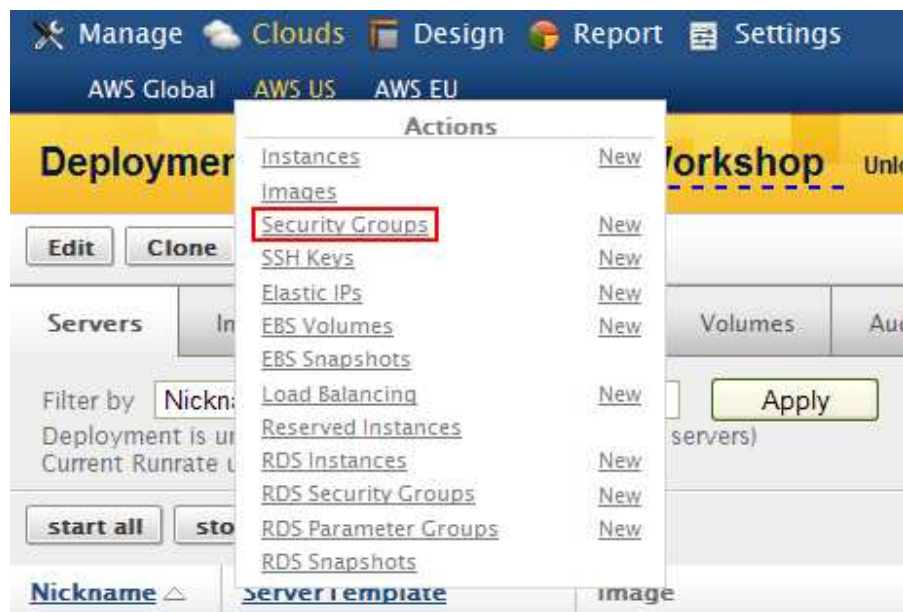
Availability Zone Any (used by the deployment)

Elastic IP -none-

Associate IP at launch

Add Cancel

Speaking of security groups, go to Clouds > AWS US > Security Groups:



Click on the default group:



Unblock port 22 (SSH):

Add IPs: Ports: ..
(Use 0.0.0.0/0 to designate "any" IP address; use ports 0..65535 to designate "any" port)

Unblock port 80 (HTTP):

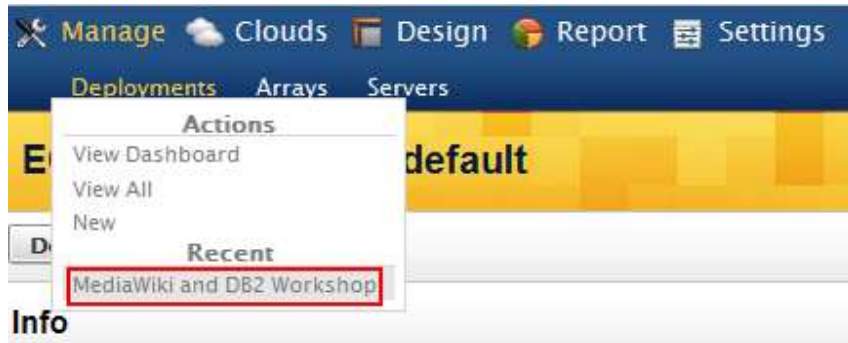
Add IPs: Ports: ..
(Use 0.0.0.0/0 to designate "any" IP address; use ports 0..65535 to designate "any" port)

Unblock port 50000 (DB2):

Add IPs: Ports: ..
(Use 0.0.0.0/0 to designate "any" IP address; use ports 0..65535 to designate "any" port)

2.4 Start the servers

Go back to your deployment:



Start the DB2 server:



Set MON_PROCESS to db2sysc and USE_LOCAL_STORAGE to YES. Local storage means that the databases will go on the virtual machine image directly, rather than on a mounted Amazon EBS volume:

DB2_CONFIG_EBS_DEVICE: Used in: [Boot \(possibly format\) and mount the EBS volume script \[rev 9\]](#)

DB2_DAS_PASSWORD: Used in: [Install DB2 Express-C \[rev 15\]](#)

DB2_DATA_EBS_DEVICE: Used in: [Boot \(possibly format\) and mount the EBS volume script \[rev 9\]](#)

DB2_FENCED_PASSWORD: Used in: [Install DB2 Express-C \[rev 15\]](#)

DB2_INST_PASSWORD: Used in: [Install DB2 Express-C \[rev 15\]](#)

MON_PROCESSES: Used in: [SYS Monitoring install v8 \[rev 5\]](#)

SYSLOG_SERVER: Used in: [SYS Syslog Remote Logging Client v7 \[rev 3\]](#)

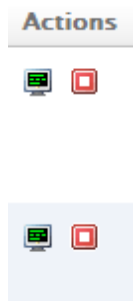
USE_LOCAL_STORAGE: Used in: [Boot \(possibly format\) and mount the EBS volume script \[rev 9\]](#)

Start the MediaWiki server:



If you like, you can look at the boot logs by going to MediaWiki app server > Audit Entries.

Wait for both servers to finish booting. When they do, you will see a stop icon for both:



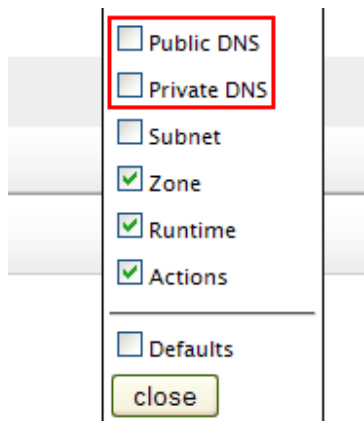
3.1 Configure MediaWiki

3.1.1 Find out the hostnames

While looking at your MediaWiki and DB2 deployment, click on the icon to the right of the server count to customize the view:



Add Public DNS and Private DNS columns to the view:



Those are effectively the internal hostname (used for free server-to-server communication) and the external hostname visible to the outside world.

Jot down the Private DNS of the DB2 server and the Public DNS of the MediaWiki server:

Nickname	ServerTemplate	Image	Cloud	CPU	Public IP	Private IP	Public DNS	Private DNS
DB2_server	IBM DB2 Express-C 9.7 (Ubuntu 8.04) v2 [HEAD]	RightImage Ubuntu8_04_V4_3_4_Alpha (ami-2c9f7843)	EC2 US	■	--none--	10.254.91.195	ec2-174-129-88-146.compute-1.amazonaws.com	domU-12-31-39-00-54-3
MediaWiki app server	MediaWiki app server [HEAD]	RightImage Ubuntu_8_04_i386_v5_0_3 (ami-5419f93d)	EC2 US	●	--none--	10.211.175.132	ec2-174-129-184-151.compute-1.amazonaws.com	domU-12-31-39-0A-48-76

Go to <http://hostname/mediawiki> where hostname is the Public DNS of the MediaWiki server

e.g. <http://ec2-174-129-184-151.compute-1.amazonaws.com/mediawiki/>

3.1.2 Run through the configuration wizard

Go to <http://Public-DNS-of-MediaWiki-server/mediawiki/>

Click to set up the wiki:



MediaWiki 1.16alpha

Please [set up the wiki](#) first.

Name it:

Wiki name: **Must not be blank or "MediaWiki" and may not contain "#"**

Preferably a short word without punctuation, i.e. "Wikipedia".

Will appear as the namespace name for "meta" pages, and throughout the interface.

Set the admin password:

Admin username:
Password: **Cannot be blank**
Password confirm:

An admin can lock/delete pages, block users from editing, and do other maintenance tasks.

A new account will be added only when creating a new wiki database.

The password cannot be the same as the username.

Choose DB2 as the database type:

Database config

Database type: DB2

Set hostname to the Private DNS of the DB2 server:

Database host:

If your database server isn't on your web server, enter the name or IP address here.

For the next section:

- "wikidb" is the default wiki name in our boot RightScript
- "db2inst1" is the DB2 instance owner
- "password" is the default password for the DB2 ServerTemplate

Database name:	<input type="text" value="wikidb"/>	
DB username:	<input type="text" value="db2inst1"/>	
DB password:	<input type="password" value="••••••••"/>	Must not be blank
DB password confirm:	<input type="password" value="••••••••"/>	

There is no local copy of the DB2 catalog on the MediaWiki server – rather, we want an uncataloged connection:

Select one:

- Cataloged (DB2 installed locally)
- Uncataloged (remote DB2 through ODBC)

Let's install:

Install MediaWiki!

It's alive:

MediaWiki 1.16alpha Installation

- Don't forget security updates! Keep an eye on the [low-traffic release announcements mailing list](#).

Checking environment...

Please include all of the lines below when reporting installation problems.

- PHP 5.2.4-2ubuntu5.7 installed
- Found database drivers for: DB2
- PHP server API is apache2handler; ok, using pretty URLs (`index.php/Page_Title`)
- Have XML / Latin1-UTF-8 conversion support.
- Session save path (`/var/lib/php5`) appears to be valid.
- PHP's `memory_limit` is 16M bytes. Raised `memory_limit` to 52428800 bytes.
- Couldn't find Turck MMCache, eAccelerator, APC or XCache; cannot use these for object caching.
- Found GNU diff3: `/usr/bin/diff3`.
- Couldn't find GD library or ImageMagick; image thumbnailing disabled.
- Installation directory: `/var/www/mediawiki`
- Script URI path: `/mediawiki`
- Installing MediaWiki with `php` file extensions
- **Environment checked. You can install MediaWiki.**
- **Generating configuration file...**
- Database type: DB2
- Loading class: `Databaselm_db2`
- Attempting to connect to database "wikidb" as "db2inst1"...
- Connected to ibm_db2 09.07.0000
- Creating tables... done.
- MediaWiki tables successfully created
- Initializing statistics...
- Created sysop account WikiSysop.
- Creating `LocalSettings.php`...

Installation successful! Move the `config/LocalSettings.php` file to the parent directory, then follow [this link](#) to your wiki.

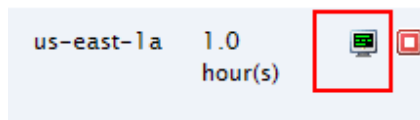
You should change file permissions for `LocalSettings.php` as required to prevent other users on the server reading passwords and altering configuration data.

3.1.3 Move LocalSettings.php

Go to your MediaWiki and DB2 deployment:



Open the SSH console for your MediaWiki app server:



Use MindTerm:



Change directories to /var/www/mediawiki:

```

Welcome to a managed virtual machine brought to you by RightScale!

*****
*****
**      Your instance is now operational.      **
**      All of the configuration has completed.  **
**      Please check /var/log/messages for details.  **
*****
*****
root@domU-12-31-39-0A-48-76:~# cd /var/www/mediawiki

```

Move config/LocalSettings.php to the current directory:

```

root@domU-12-31-39-0A-48-76:~# cd /var/www/mediawiki
root@domU-12-31-39-0A-48-76:/var/www/mediawiki# mv config/LocalSettings.php ./

```

3.1.4 Use MediaWiki

Feel free to follow the link now:

Installation successful! Move the `config/LocalSettings.php` file to the parent directory, then follow [this link](#) to your wiki.

You should change file permissions for `LocalSettings.php` as required to prevent other users on the server reading passwords and altering configuration data.

We now have MediaWiki running on DB2 in the Cloud:



4.0 Report bugs

Report any bugs you see to leons.petrazickis@gmail.com

Acknowledgements

A big thank you goes to Bradley Steinfeld and Leon Katsnelson for advising and helping to prepare for this workshop.