

VoiceBase.com

распределенное приложение
на платформе Amazon Cloud

Докладчик:
Лаухин Роман
ООО «Кварт-
Софт»

Цели проекта

- Индексированный поиск по голосовому контенту (транскрипции)
- Создание транскрипций для звукового контента (voice)
- Хранение контента
- Предоставление публичного доступа к контенту и его транскрипции

Пользователь может:

- Загрузить аудио или видео файл (voice)
- Искать контент среди своих и публичных записях.

Home page

www.voicebase.com/my_account/voice_files



VoiceBase™
.com

Welcome **Matthew Rodriguez** You have **79.44** voice credits. [Add Voice Credits](#)

Search

Upload Audio

My Account

Add Voice Credits

Logout

Search

SEARCH

0 results found

New Comments

My Uploads

Shares by Others

Expiring Next

Sort By: **matches count** **descending** Include Public Content

Showing 1-10 of 58 recordings [Next Page](#)

TEDTalks : Eben Bayer: Are mushrooms...
Product designer Eben Bayer reveals his recipe for a new, fungus-based packaging material that prote...
2011-05-12/01:31 PM - Length: 9 min 35 sec

0 comments (0 new) 0 shares



fables_foxgrapes

2011-05-06/01:42 PM - Length: 46 sec

3 comments (1 new) 1 share



Iphone4recordingOriginal SVN update

2011-05-05/03:49 PM - Length: 1 min 37 sec

0 comments (0 new) 0 shares



Iphone4recordingOriginal
test

2011-04-26/10:48 AM - Length: 1 min 37 sec

0 comments (0 new) 0 shares



VoiceBase™
.com

Upload files

Search

Upload Audio

My Account

Add Voice Credits

Logout

Password

My Email

Personal Info

Notifications

Upload History

Search Widget Code

Increase Voice Credits

Upload Voice Recordings

You can upload up to 79 h 26 min 31 sec of recordings.



Select files

Add files to the upload queue and click the start button.

Filename	Status	Size

0% 0 kb

supported file types: *.wav,*.mp3,*.mp4,*.flv,*.wmv,*.avi,*.mov,*.mpeg,*.aac,*.aiff,*.au,*.ogg,*.flac,*.ra,*.m4a,*.wma,*.m4v,*.caf
maximum file size available for upload: 750 MB

Record audio/video

Search

Upload Audio

My Account

Add Voice Credits

Logout

Password

My Email

Personal Info

Notifications

Upload History

Search Widget
Code

Increase Voice
Credits

Upload Audio

Record Audio

STEP 1: Audio & Video Options



Select Microphone

Set Volume

Adjust volume to have green indicator be between red lines while speaking.

Select Webcam

Set Quality
(high compression) uncompressed

Confirm

Search

Search

Upload Audio

My Account

Add Voice Credits

Logout

Search

English

book

SEARCH

▲▲ 3 results found

Sort By: matches count

descending

Include Public Content

New Comments

My Uploads

Shares by Others

Expiring Next

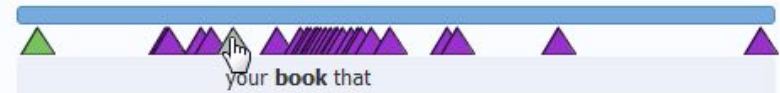
english stereo

test

2010-11-09/09:40 AM - Length: 26 min 11 sec

0 comments (0 new)

0 shares



Woodburn aac 32kb 22050khz

woodburn city council meeting

2010-10-01/05:02 AM - Length: 1 h 44 min 49 sec

0 comments (0 new)



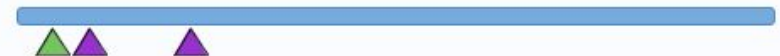
414_test_dragon

test large

2010-10-12/11:00 AM - Length: 58 min

0 comments (0 new)

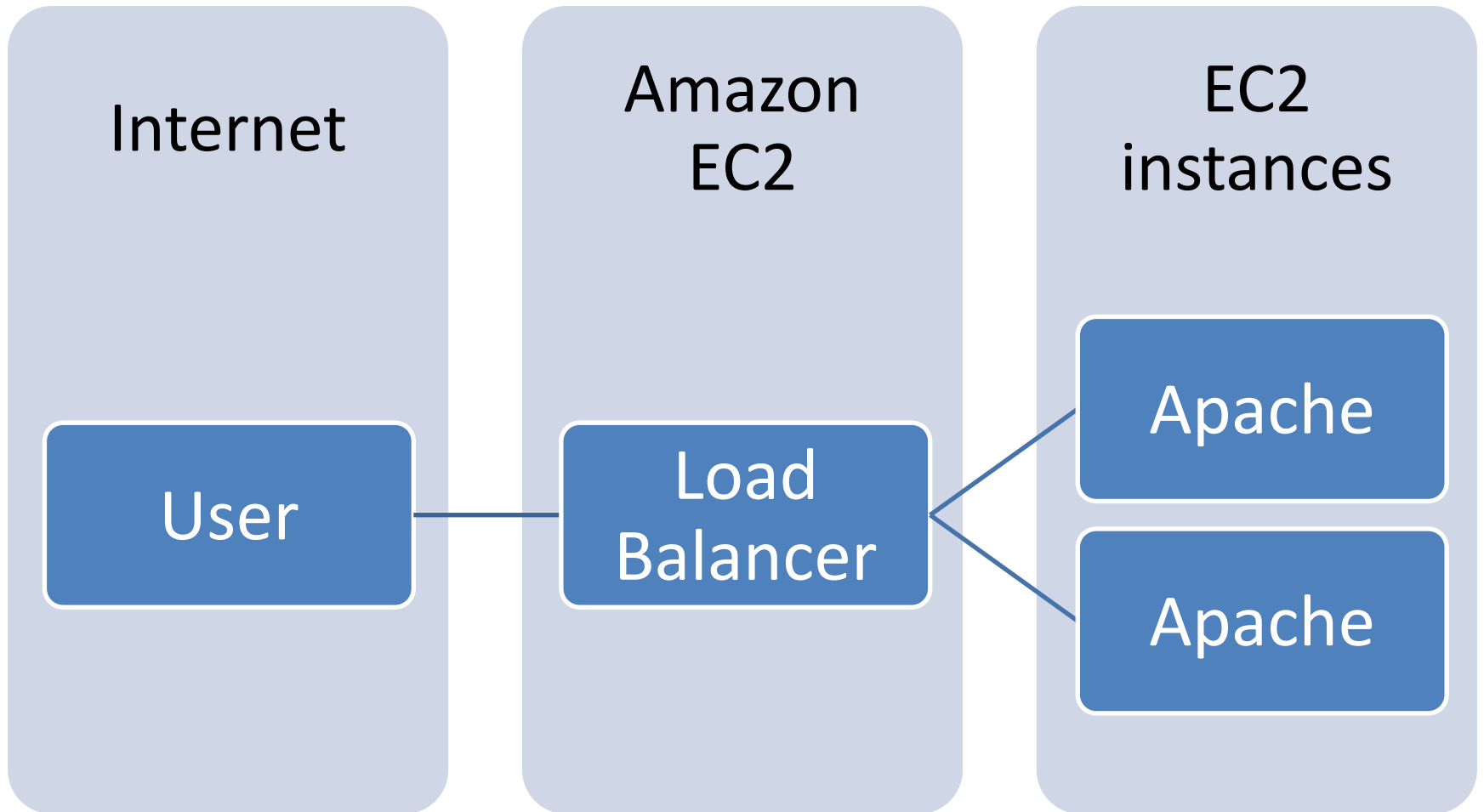
0 shares



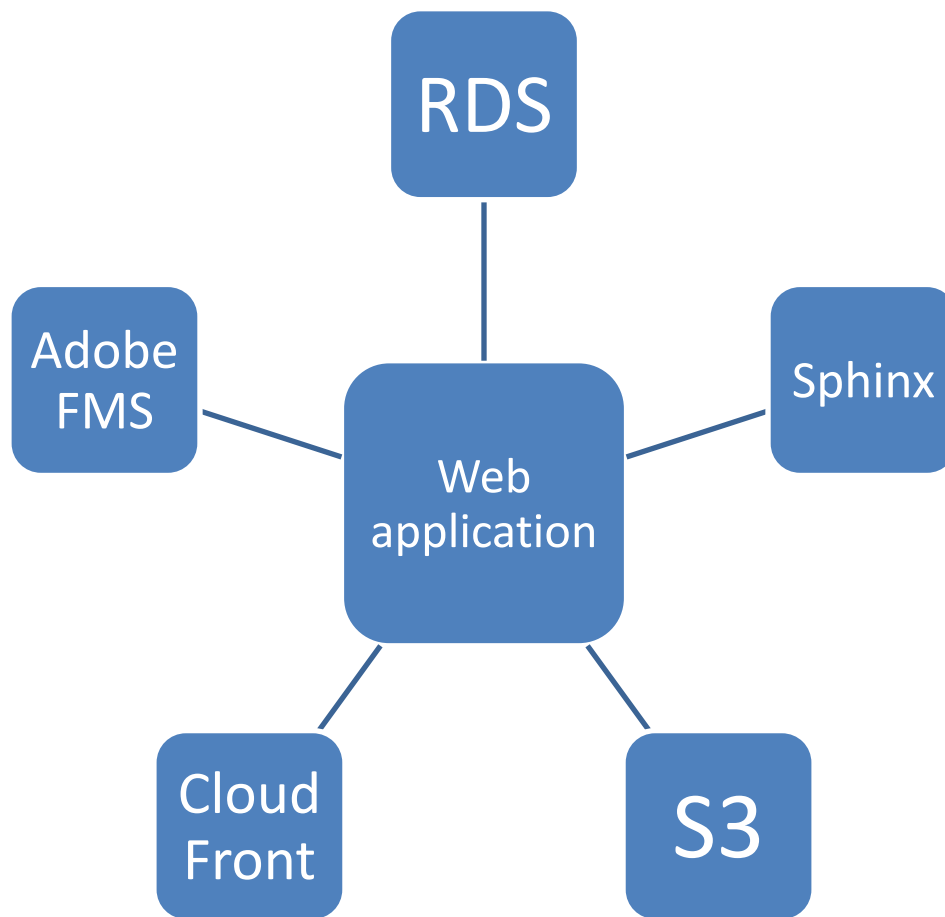
Application services

- Web сервер (apache/nginx)
- База данных (mysql)
- Запись аудио/видео (Adobe FMS)
- Полнотекстовый поиск (sphinx)
- Конвертация файлов (ffmpeg)
- Транскрибирование (dragon, nexiwave, human)

Web сервер



Ресурсы



Процессы



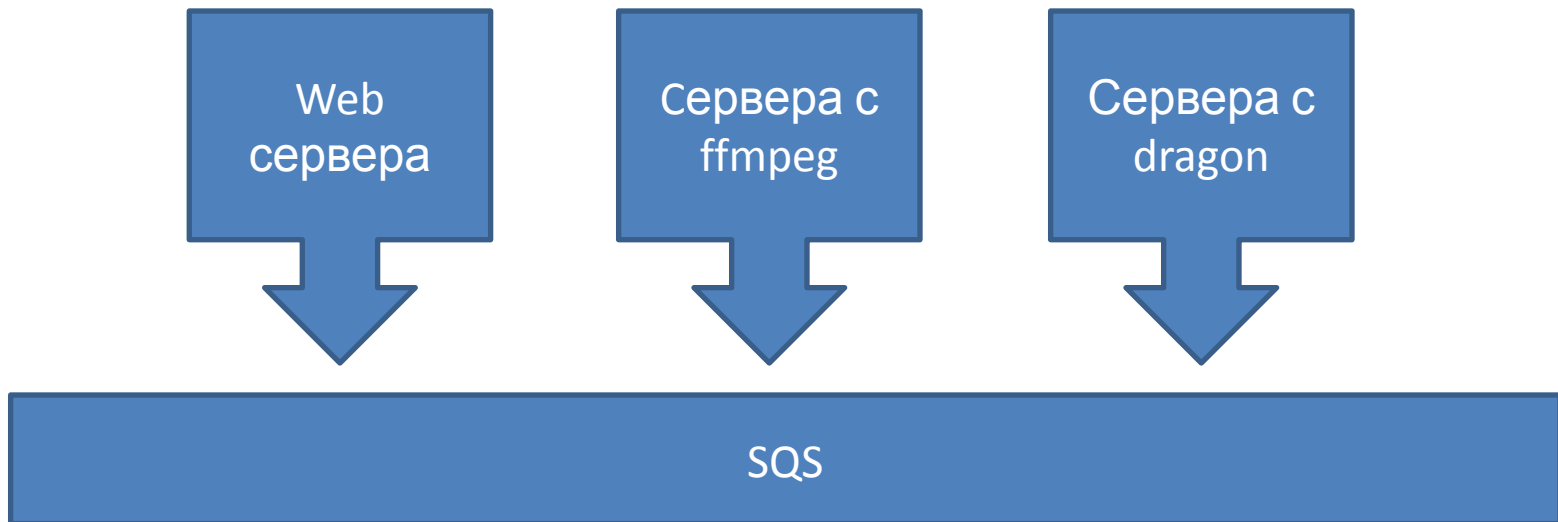
Загрузка на S3

- Web UI
 - Пользователь загрузил файл
- Gearman
 - Задание на загрузку файла
- SQS
 - Загрузка файла на S3
 - Отправка задания на конвертацию (SQS)

Конвертация и транскрибирование

- SQS
 - Конвертация файла
 - Загрузка на S3
 - Задание на транскрибирование
- SQS
 - Транскрибирование
 - Задание на преобразование формата транскрипции
- SQS
 - Подготовка транскрипции
 - Сохранение транскрипции на S3

Общая схема



Amazon management console

aws.amazon.com | AWS | Products | Developers | Community | Support | Account | Welcome, Voicebase | Settings | Sign Out

AWS Elastic Beanstalk S3 Amazon EC2 Amazon VPC Amazon CloudWatch Amazon Elastic MapReduce Amazon CloudFront AWS CloudFormation Amazon RDS Amazon SNS Amazon IAM

Navigation

Region: US East (Virginia)

- EC2 Dashboard
- INSTANCES
 - Instances
 - Spot Requests
 - Reserved Instances
- IMAGES
 - AMIs
 - Bundle Tasks
- ELASTIC BLOCK STORE
 - Volumes
 - Snapshots
- NETWORKING & SECURITY
 - Security Groups
 - Elastic IPs
 - Placement Groups
 - Load Balancers
 - Key Pairs

My Instances

Launch Instance Instance Actions Show/Hide Refresh Help

Viewing: All Instances All Instance Types 1 to 14 of 14 Instances

Name	Instance	AMI ID	Root Device	Type	Status	Security Groups	Key Pair Name	Monitoring	Vir
LIVE-Sphinx	i-5c73cc36	ami-dc977fb5	ebs	c1.medium	running	default	qs_voicebase	basic	par
BETA-sphinx	i-56e7e83b	ami-02b2436b	ebs	m1.small	running	default	qs_voicebase	basic	par
BETA-DRAGON-No-Delete	i-f2848b9f	ami-2a8a7d43	ebs	c1.medium	running	win_voicebase	qs_voicebase	detailed	hvn
BETA-ffmpeg-beta-1	i-0df41c61	ami-2495644d	ebs	c1.medium	running	default	qs_voicebase	basic	par
BETA-www-1	i-d9658db5	ami-14c0317d	ebs	c1.medium	running	default	qs_voicebase	detailed	par
LIVE-media-1	i-3f8a1f53	ami-3219e95b	ebs	c1.medium	running	default	qs_voicebase	detailed	par
LIVE-www-1	i-6f41d403	ami-3419e95d	ebs	c1.medium	running	default	qs_voicebase	basic	par
FMS	i-b99f90d5	ami-6a1deb03	instance-store	m1.large	running	default	qs_voicebase	basic	par
A_CMUSphinxSpeechServer32	i-8835d1e7	ami-08728661	ebs	t1.micro	running	default	qs_voicebase	basic	par
LIVE-SendMail-RootDomain-Forward	i-bae373d5	ami-5464993d	ebs	t1.micro	running	default	qs_voicebase	basic	par
panda-test	i-d27106bd	ami-b10dead8	instance-store	m1.small	running	default	qs_voicebase	basic	par
<input checked="" type="checkbox"/> LIVE-DRAGON-1.5_no-delete	i-8e2a2ee1	ami-6429d60d	ebs	c1.medium	running	win_voicebase	qs_voicebase	detailed	hvn
SAL_CMUSphinxSpeechServer32	i-7efcec11	ami-28689741	ebs	c1.medium	running	default	qs_voicebase	basic	par
LIVE-media-2-spot	i-a75fbbc9	ami-7cb34d15	ebs	c1.medium	running	default	qs_voicebase	detailed	par

Graphs are for 1 instance with detailed monitoring enabled. Times are displayed in UTC. Time Range: Last Hour Refresh

Avg CPU Utilization (Percent)

Time	Avg CPU Utilization (Percent)
5/18 14:00	~50
5/18 14:30	~50

Avg Disk Reads (Bytes)

Time	Avg Disk Reads (Bytes)
5/18 14:00	~0.0
5/18 14:30	~0.0

Avg Disk Writes (Bytes)

Time	Avg Disk Writes (Bytes)
5/18 14:00	~0.0
5/18 14:30	~0.0

Max Network In (Bytes)

Time	Max Network In (Bytes)
5/18 14:00	~0
5/18 14:30	~25,000,000

Обновление (ffmpeg, dragon)

- Остановка избыточных серверов
- Обновление ПО
- Создание эталонного AMI

Сервисы от Amazon

- EC2
 - Linux/Windows сервера (Web, ffmpeg, dragon, sphinx)
 - Сервера «по требованию» (spot instances)
 - Load balancer
 - Создание AMI
 - EBS
 - Elastic IP

Сервисы от Amazon

- S3
- CloudFront
- RDS

Вопросы?

Материалы

- <http://www.voicebase.com>
- <http://aws.amazon.com/products/>
- <http://aws.amazon.com/documentation/>
- <http://gearman.org/>

- <http://www.demo.com/alumni/demo2010fall/219504.html>

Спасибо за внимание!

Контакт:

Email: rl@quart-soft.com

Skype: r.laukhin