

# VoxaleadNews

A SCALABLE VIDEO SEARCH ENGINE BASED ON AUDIO CONTENT INDEXING AND  
TOPIC SEGMENTATION





# Agenda

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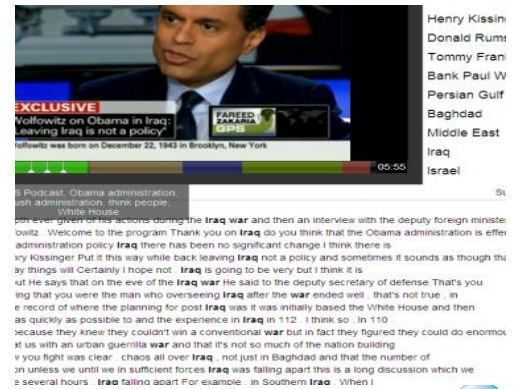
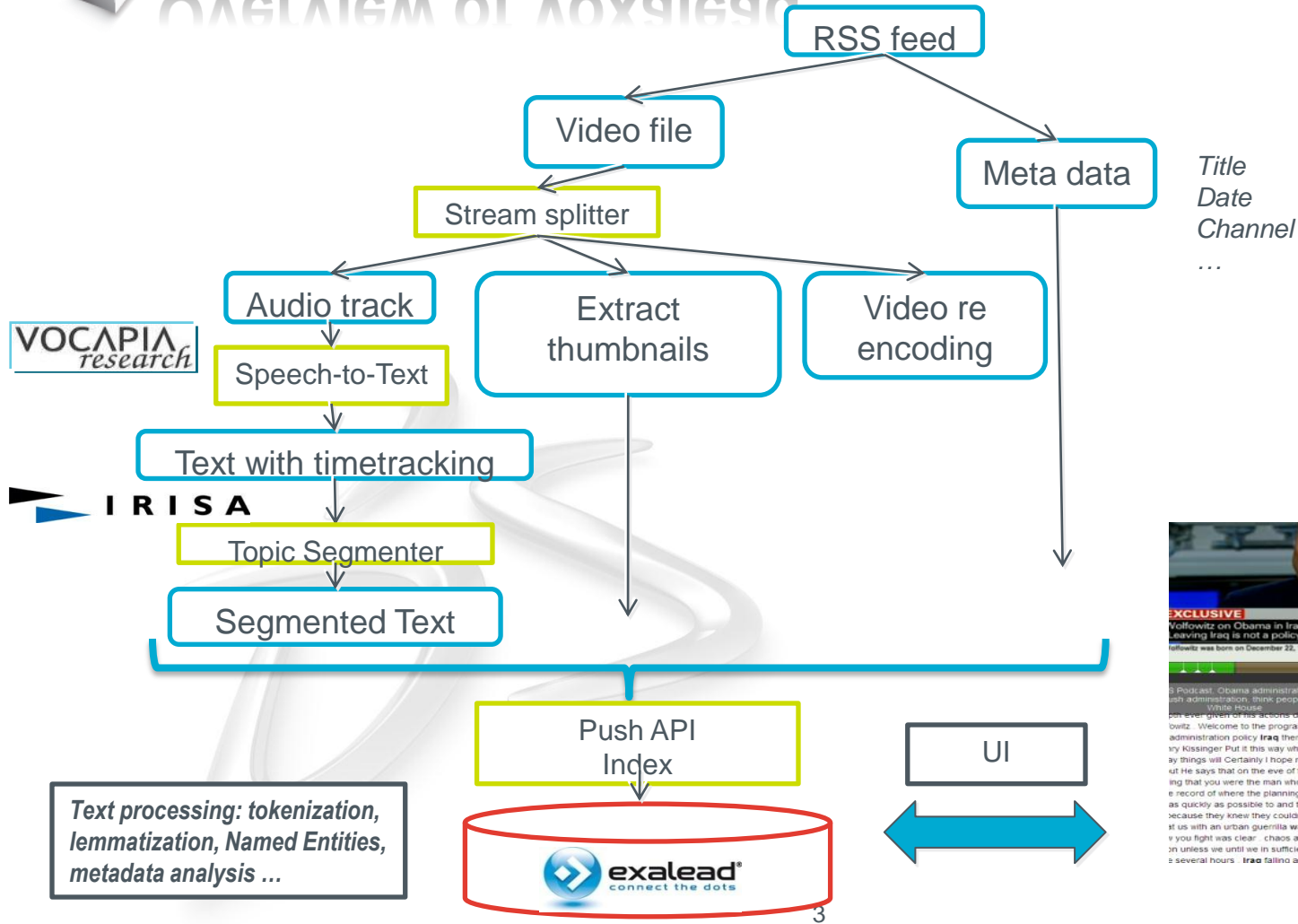
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Scalability issue



# Overview of Voxlead





# Overview of Voxalead

## What is indexed



### Metadata included into the Rss:

- Title (can be relevant or not)
- Summary (can be relevant or not)
- Date
- Tags



### Metada automatically generated:

- Speech from the audio part



# Overview of Voxalead

## MSNBC Hardball with Chris Matthews - 09-21-2011-143252

*Listen to daily highlights from MSNBC's "Hardball with Chris Matthews." Broadcasting from the MSNBC studios in Washington, D.C., veteran journalist Matthews, a former Washington bureau chief, presidential speechwriter, congressional staffer and also a best-selling author, hosts in-depth political*



**09:47:Obama's** gonna be treated very well on the Jewish community anybody cares what is the next couple months because of this, and her is taken by opposing any trustees they'd being created by the one of these circumstances

**10:43:** He's a neighbor in good standing as a thought last word John well, I just want to say it's also tough stance for President **Obama** to take because we are also trying to reach out to the newly liberated newly democratic states

published by MSNBC Hardball with Chris Matthews on Sept. 21, 2011, 11:33 p.m.

## Netanyahu: Obama deserves 'badge of honor' on Israel

*Netanyahu: **Obama** deserves 'badge of honor' on Israel Israeli Prime Minister Benjamin Netanyahu described Wednesday US President Barack **Obama's** opposition to a Palestinian push for statehood recognition at the UN as "a badge of honor."Duration 00:38 From: AFP Views: 154 8*



**00:02:**As I have said in the speech, and then I get word General Assembly the bonds between the United States and Israel are unbreakable and United States commitment to Israel's security is on break. This is a badge of honor, and I want to thank you all wearing that badge of honor and also express my hope that others will follow your exams to vote. You know you're

published by AFP Videos - English on Sept. 21, 2011, 10:29 p.m.

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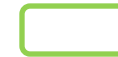
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Relevant content



Non relevant content

# Searching and browsing news podcasts



Voxalead 

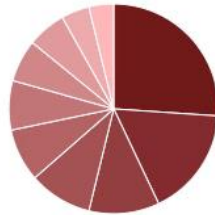
Search

Today Yesterday **Week** Month Trimester

Charts

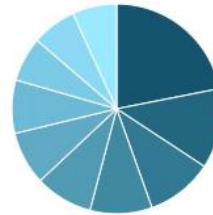
Tags

## Organization



- United Nations
- Security Council
- NATO
- West Bank
- IMF
- UBS
- NASA
- European Central Bank
- Sky News
- NTSB

## Person/People



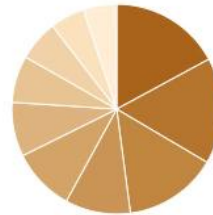
- Barack Obama
- Rick Perry
- Rick Parry
- Bill Clinton
- Mitt Romney
- Jimmy Carter
- Nicolas Sarkozy
- David Cameron
- Mike Barnicle
- Mahmoud Abbas

## Event



- Super Cup
- Republican Congress

## Location



- New York
- USA
- Washington
- Libya
- Israël
- London
- UK
- Texas
- Greece
- Middle East





# Video segmentation



## Segmentation for relevancy

- « Obama China » query



## Segmentation text based

- Based on the automatic transcription
- No learning required: based on the words



# Video segmentation



Voxalead

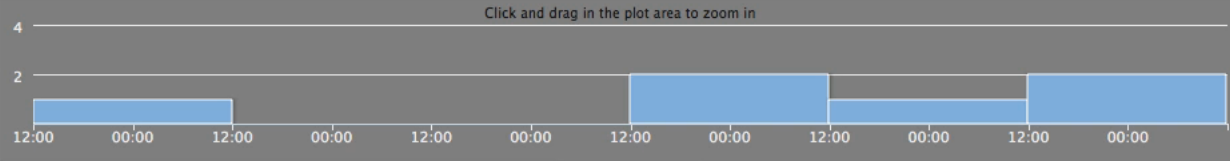


Troy Davis

2011-09-01:2011-09-30

Search

6 results.



## MSNBC Rachel Maddow (video) - 09-20-2011-204541

\*\*\*Now, by popular demand, the full show!\*\*\* "The Rachel Maddow Show," which airs 9 p.m. ET weeknights on MSNBC, is a smart look at politics, pop culture, and all the day's top stories. It's mind over chatter! Maddow is a political commentator for MSNBC and the Air America Radio network. This video



**36:35:** They use on animals lethal injection protocol is brutal and therefore unconstitutional because about lawsuits somewhere any sealed locker in Georgia is a video of the state, killing a man the head of the man who's bringing that lawsuit the state of Georgia is now set to expect secured another man and then in **Troy Davis** 20 years ago **Troy Davis** was convicted and sentenced to death for the murder of a Savannah police officer after nine witnesses identified him as the shooter



**37:11:** For example, has

published by MSNBC Rachel Maddow on Sept. 21, 2011, 5:48 a.m.

## NBC Nightly News (video) - 09-20-2011-164250

Watch "NBC Nightly News with Brian Williams," providing reports and analysis of the day's most newsworthy national and international events. This video podcast, updated each weekday evening by MSNBC.com, brings you the day's show in its entirety. For more from "Nightly News", visit <http://nightly>



**08:04:** Calls for clemency for Georgia death row inmate **Troy Davis** would one last chance to appeal his execution

### Channel

- » NBC Nightly News
- » The CNN Daily
- » CNN In Case You Missed It
- » MSNBC Rachel Maddow

### related terms

- » death row
- » people world wide
- » death sentence
- » state taxes
- » Burger King

### Person/People

- » Jimmy Carter
- » Mark McPhail
- » Ebenezer Baptist
- » Rick Perry
- » Sergeant Jonathan Mills
- » Chairman Mike Mullen
- » David Mattingly
- » Walter Mondale
- » Eleanor Mondale
- » Patrick Kennedy
- » Benedict Georgia
- » Gary Ross



# Scalability issue

## Some numbers:

- About 400 new podcasts indexed everyday
- Rss feeds are refreshed every hour
- About 150,000 podcasts have been indexed

## Hardware:

- One server can process potentially 100 hours of podcasts each day (currently, it processes around 20 hours of new podcast each day)
  - It includes the processing and the indexing of the video
- One server is used for the search

## The system is fully automatic