

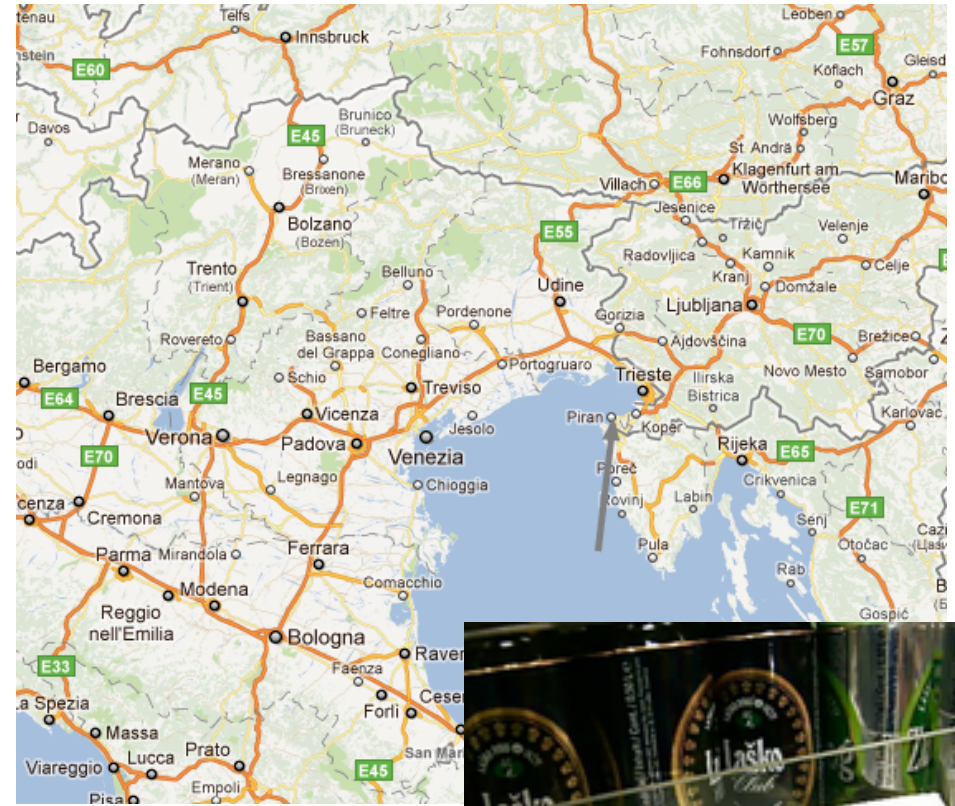
# Media derivatives: Take control over your files

Janez Urevc

[@slashrsm](http://janezurevc.name)

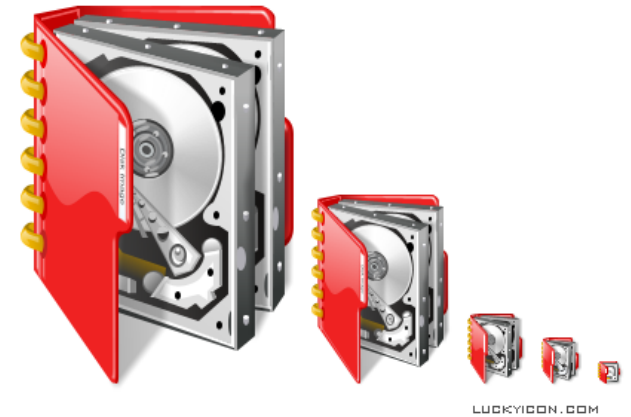
# About me

- developer, freelancer
- currently working for biggest Slovenian daily newspaper
- high traffic media websites (for our standards :))
- from Portorož, Slovenia
- 2011 Google Summer of code student
- slides: [bit.ly/media-derivatives](http://bit.ly/media-derivatives)



# File entity

- extends core file entity (file and image field)
- files become "real" entities (just like node, term, user, ...)
- fieldable files
- file types (bundles)
- display handling (formatters)
- was part of Media, now separate module
- [drupal.org/project/file\\_entity](http://drupal.org/project/file_entity)



# Media

- central file management
- browser/library
- widget for file, image and media field types
- [drupal.org/project/media](http://drupal.org/project/media)
- under heavy development

# Media - file browser

Tasks Index Dashboard **Vsebine** Struktura Izgled People Moduli Configuration Poročila Pomoč

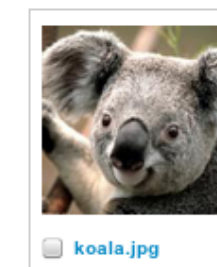
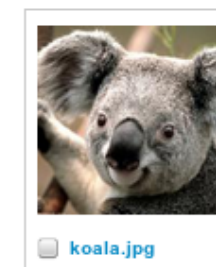
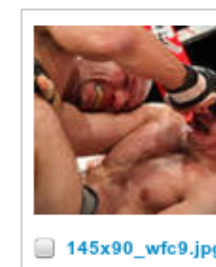
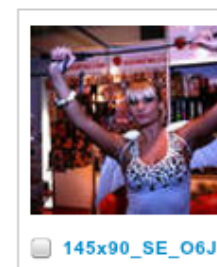
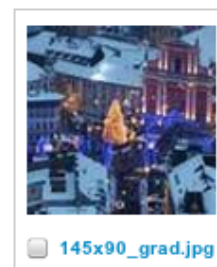
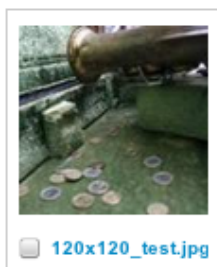
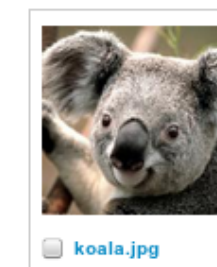
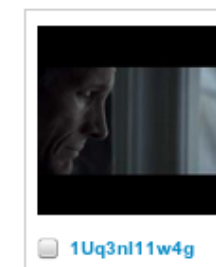
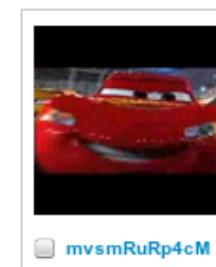
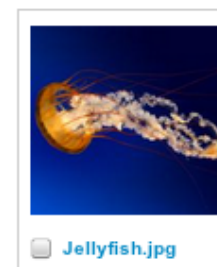
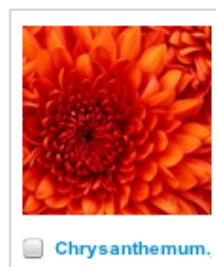
Pozdravljen **slashrsm** Odjavi se

Domov » Upravljanje » Vsebine

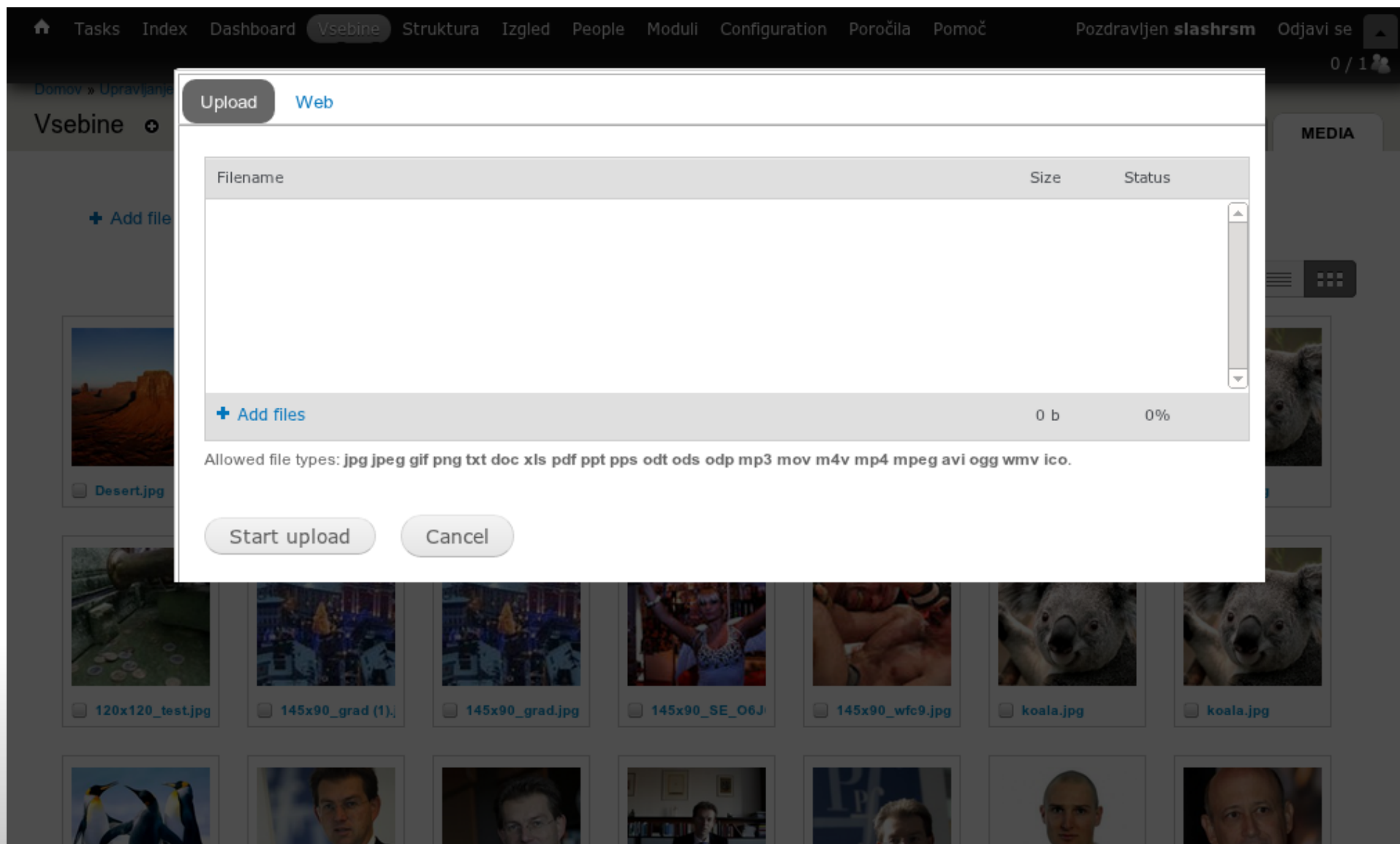
Vsebine

VSEBINE KOMENTARJI MEDIA

+ Add file



# Media - multi upload



The screenshot displays a Drupal administration interface with a modal window for multi-file upload. The modal has tabs for 'Upload' and 'Web'. Below the tabs is a table with columns for 'Filename', 'Size', and 'Status'. The table is currently empty, with a '+ Add files' button at the bottom left. Below the table, the allowed file types are listed: 'Allowed file types: jpg jpeg gif png txt doc xls pdf ppt pps odt ods odp mp3 mov m4v mp4 mpeg avi ogg wmv ico.'. At the bottom of the modal are 'Start upload' and 'Cancel' buttons. The background shows a grid of media items, including 'Desert.jpg', '120x120\_test.jpg', '145x90\_grad (1).', '145x90\_grad.jpg', '145x90\_SE\_O6J', '145x90\_wfc9.jpg', 'koala.jpg', and another 'koala.jpg'.

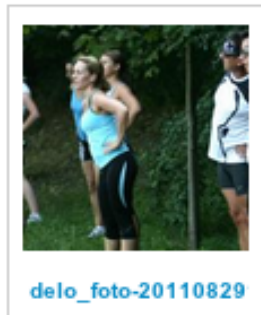
Filename	Size	Status
+ Add files		

Allowed file types: jpg jpeg gif png txt doc xls pdf ppt pps odt ods odp mp3 mov m4v mp4 mpeg avi ogg wmv ico.

Start upload Cancel

[drupal.org/project/plupload](https://drupal.org/project/plupload)

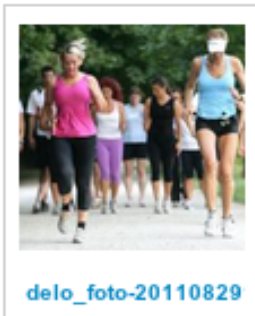
# Media - selector widget



Select media

Remove media

NASLOVNE SLIKE:



Select media

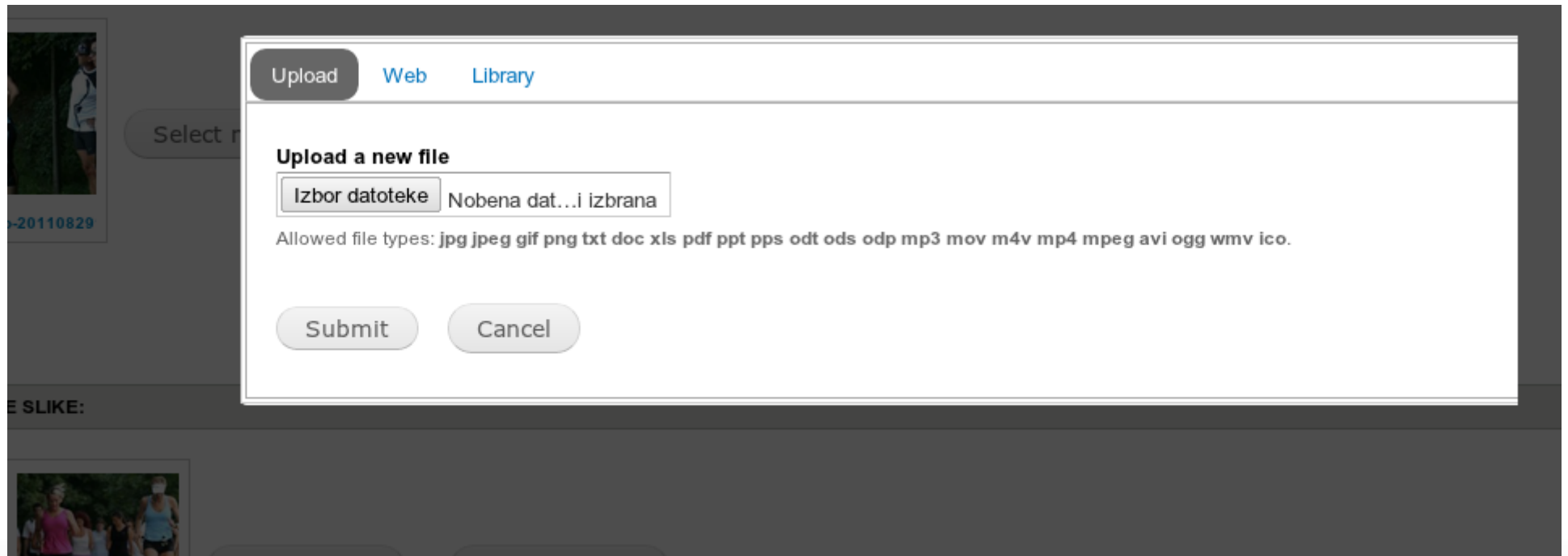
Remove media



Select media

Add another item

# Media - selector widget (cont'd)



# Media - selector widget (cont'd)

0829

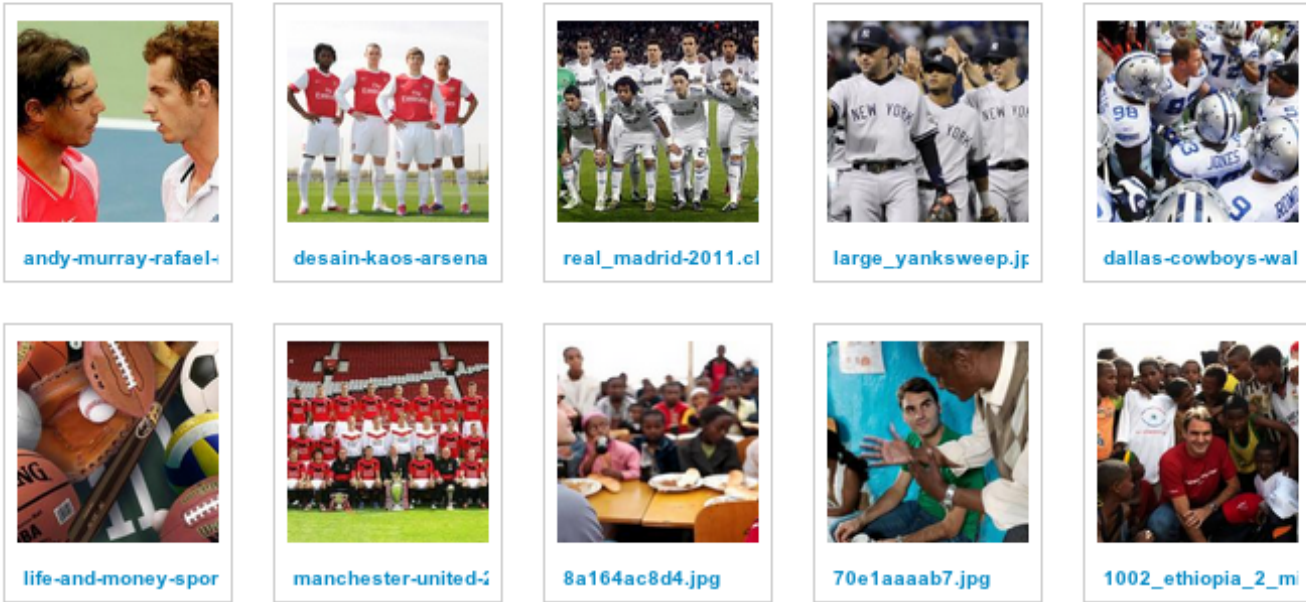
Select r

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ect media

Upload Web **Library**

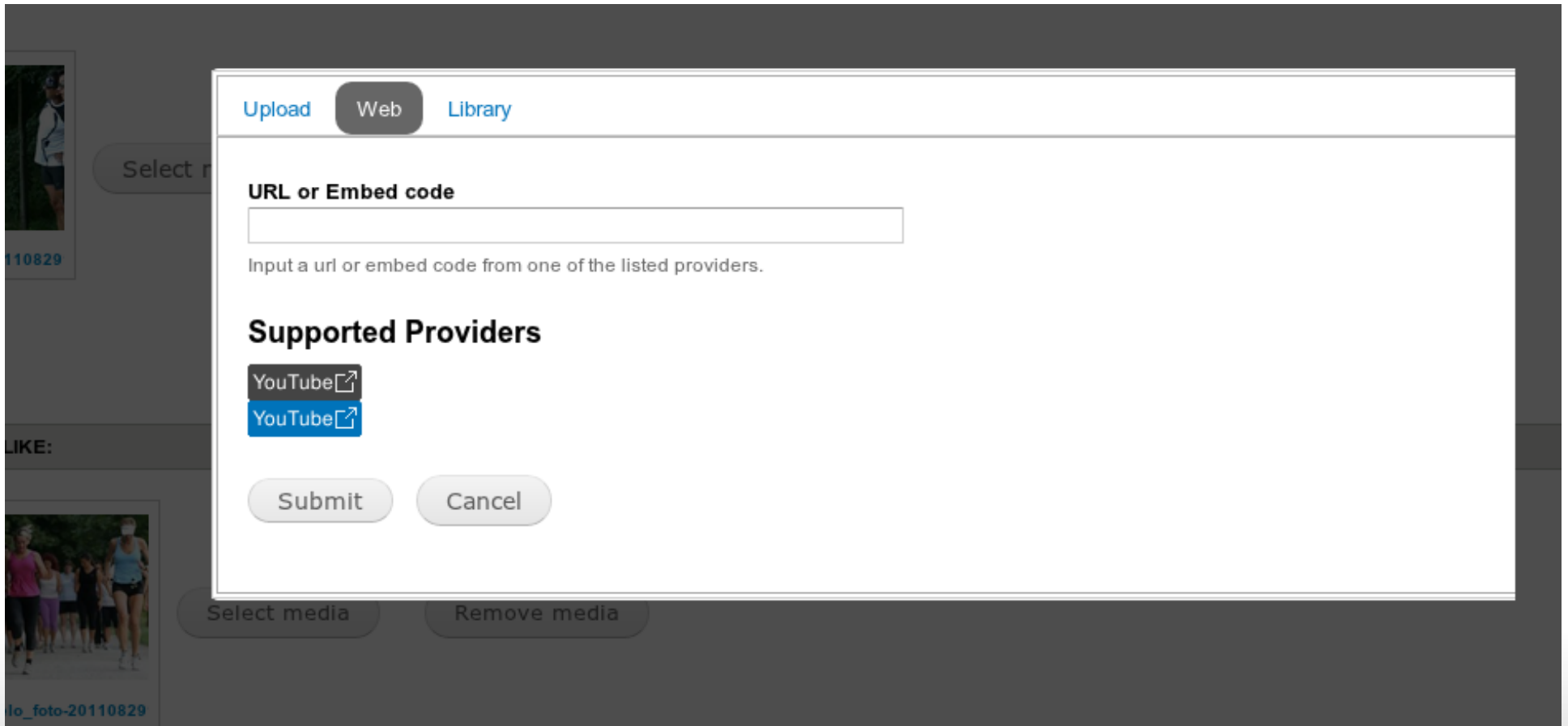


The media selector widget displays a grid of 10 image thumbnails. Each thumbnail is accompanied by a caption and a file name. The thumbnails are arranged in two rows of five. The first row contains: a photo of two men (Andy Murray and Rafael Nadal), a group of Arsenal players, a group of Real Madrid players, a group of New York Yankees players, and a group of Dallas Cowboys players. The second row contains: a collection of sports equipment, a group of Manchester United players, a group of people at a table, a man in a green shirt, and a group of people in a crowd.

 andy-murray-rafael-	 desain-kaos-arsena	 real_madrid-2011.cl	 large_yanksweep.jp	 dallas-cowboys-wal
 life-and-money-spor	 manchester-united-	 8a164ac8d4.jpg	 70e1aaaab7.jpg	 1002_ethiopia_2_m

Submit Cancel

# Media - selector widget (cont'd)



# Media derivatives API

- Summer of code 2011 project
- assets derivation framework
- very pluggable
- in early stage, under development
- [drupal.org/project/media\\_derivatives](http://drupal.org/project/media_derivatives)
- Media is not dependency, File entity currently is.

# Derivatives - Use case 1

- user uploads video file in any format
- Drupal (Derivatives API) converts this file in 3 formats:
  - ogg
  - h264
  - webm
- most of devices/browsers natively support at least one of this formats
- we display video in native HTML5 `<video>`
- can be done easily (demo)



# Derivatives - Use case 2

- user uploads video file and inserts title, description, tags, ... as fields
- Derivatives upload this video to YouTube, Vimeo, Blip.tv, ...
- fields are used for meta-data
- original file can be automatically deleted or not

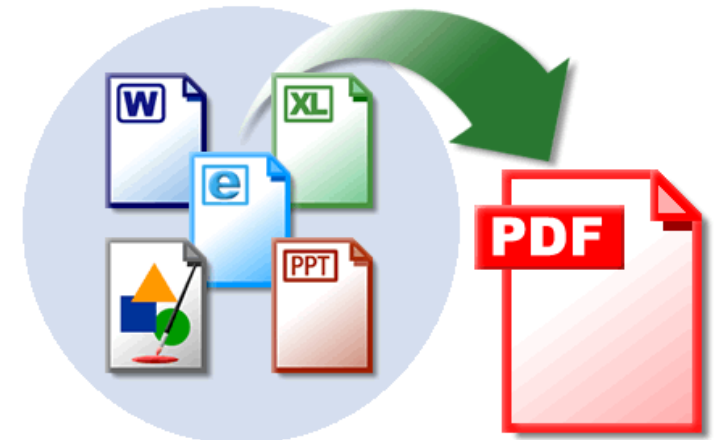
*vimeo*

 blip.tv

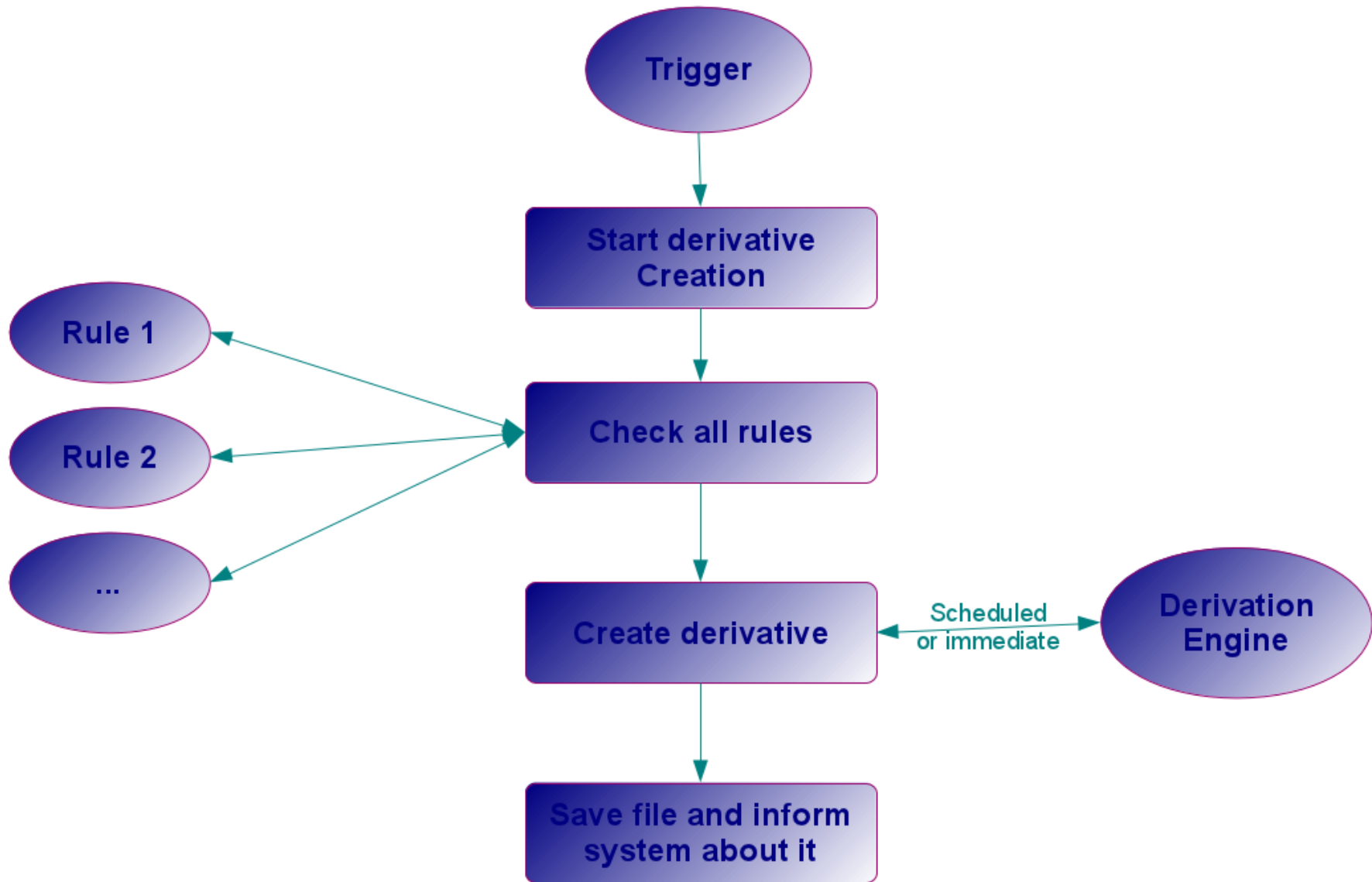


# Derivatives - use case 3

- user uploads .doc, .odt, .rft, .tex, ...
- Derivatives convert these documents to .pdf
- only .pdf is hosted to end-user
- standardization
- and many, many other use cases....



# Derivatives - Structure



# Derivatives - Plugin types

- **Events:** an event in system, that triggers the process (file insert, file added to a field, ...)
- **Conditions:** decide IF a given derivative type should be created at a current event
- **Schedulers:** decide WHEN a given derivative should be created
- **Engines:** create derivative files (drupal.  
org/project/media\_ffmpeg\_simple - the only engine at the moment)

# Derivatives - Plugin types (cont'd)

- all plugin types can be implemented in a 3rd party module
- one needs to implement two hooks
- there is some documentation and API reference
- contact me, if you need help implementing plugins

# Derivatives - Configuration presets

- each preset stores configuration for one type of derivative
  - global settings
  - conditions
  - scheduler
  - events
  - engine
- can be exported to code (Features)
- can be configured using UI

# Derivatives - Other features

- Views support (working, some improvements planned)
- Rules support (planned in ~next month)
- YouTube uploader engine (planned)
- Better ffmpeg engine (planned to be implemented during media sprint)
- archive.org engine (planned)
- ... (your idea here:))

Demo...

# Where to start?

- [drupal.org/project/media\\_derivatives](https://drupal.org/project/media_derivatives)
- [drupal.org/node/1285562](https://drupal.org/node/1285562) - some docs
- screencasts on my blog
- [drupal.org/project/media\\_derivatives\\_profile](https://drupal.org/project/media_derivatives_profile) - installation profile
- [drupal.org/project/media\\_derivatives\\_html5](https://drupal.org/project/media_derivatives_html5)



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