

# BEdita, a semantic content management framework, made in Italy

Stefano Rosanelli, ChannelWeb S.r.l.  
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# Definition

- BEedita [bi'ɛdita]  
a Web2.0 framework,  
a tool for the next Web3.0 and  
for the (future?) Semantic Web.
- Not just designed around WWW  
but also for desktop, mobile,  
paper-press



# History/motivation

- Two italian companies based in Bologna: **ChannelWeb** and **Chialab**.
- 15 years of experience in web design and software design.
- 2 years on BEdita3.0 development (2007-2009) – a *working* solution, many *real projects* based on it...



# Framework or CMS?

**CMS** : “a tool that enables tech and non tech staff to create, edit, manage and publish a variety of content (text, graphics, video, ...)”

**Framework** : “incomplete, though concrete, driving solution to recurring high-value problem”

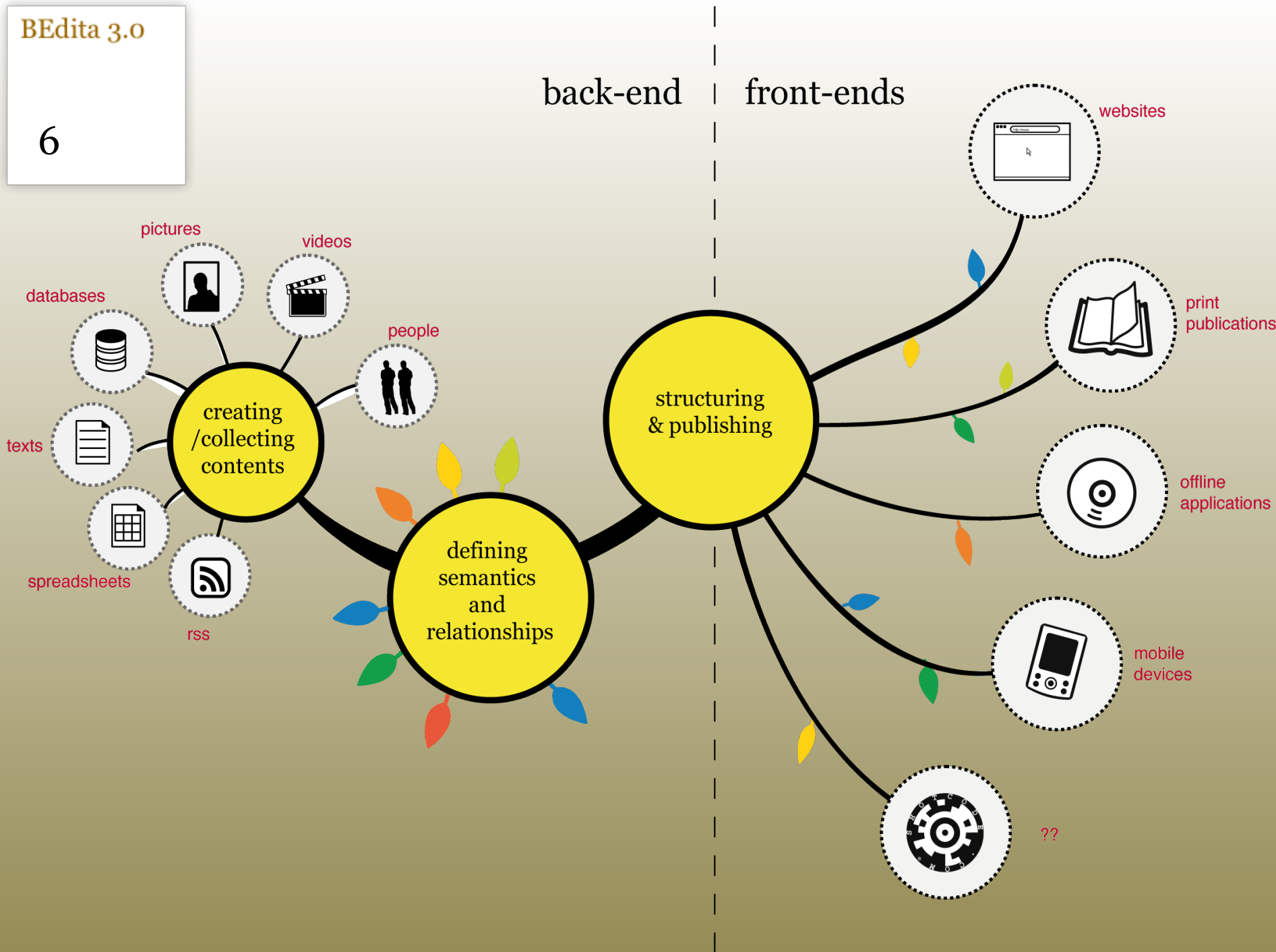
- *incomplete*: tool for [web]designer/[web]devs
- *high value problem*: applications with dynamic, multimedia contents, complex, many semantic relations



# Architecture

## 2 main elements:

- backend WebApplication: handling contents and their semantic relations; modern/elegant/ergonomic UI....featuring chromatic association between object types, lot of drag'n'drop, and other AJAX techniques;
- frontend API, services, specs, conventions to build frontend apps; Web apps mainly, but also desktop/mobile using the native REST/XML interface.



your 5 recent items —

Marco Antonio

Dune.jpg

Innaugurazione

Il primo documento

Publishing

your profile and preferences +

search —

GO

all recent items +

connected user +

tags +

- › Italiano
- › **english**
- › deutsch
- › português



## archivio

[New publishing](#)[New section](#)[+ 2008](#)[- Edizione corrente](#)[home page](#)[festival](#)[news](#)[archivio](#)[registrazione](#)[gallery](#)[dentro l'opera](#)[photogallery](#)[area stampa](#)[comunicati](#)[rassegna](#)[immagini](#)[accredito](#)[video](#)[C 2008](#)

contents

sections

properties

1	■	19-20-21 settembre WEEK-END IN GALLERIA con START	ita	>>	X
2	■	'Dynamic Table. Un dialogo fra profit e non profit'. From vol...	ita	>>	X
3	■	4 ottobre: Giornata del Contemporano	ita	>>	X
4	■	Test news	ita	>>	X
5	■	6 maggio, conferenza stampa di presentazione del festival	ita	>>	X
6	■	Al festival si parla di dismissioni creative	ita	>>	X
7	■	A conclusione della seconda giornata del festival, Suoni e lu...	ita	>>	X
8	■	Questa è una nuova news	ita	>>	X
9	■	Arte e design. Alberto Bassi intervista Alexander Von Vegesack	ita	>>	X
10	■	Ci vediamo all'Adunata del contemporaneo	ita	>>	X
11	■	Coming shows	ita	>>	X





all multimedia

798 multimedia

page 1 of 40

next

prev

Add new item

Select by type

order by:

id

title

name

type



Image



Video



Audio



Text



Spreadsheet



Presentation



Drawing



Chart



Formula

All



After Judgment S01E01:  
video/blip 0KB  
Apr 30, 2009



The Presets Just Wanna  
video/blip 0KB  
Apr 30, 2009



The Crew #109 - V  
video/blip 0KB  
Apr 30, 2009



01 - Araund.mp3  
audio/mpeg 3.8MB



botteghe.pdf  
application/pdf 39KB



img\_4169.jpg  
800x600px, 136KB

User: **ChannelWeb**  
**Global User**

› Home

› Exit



translation of

# BEedita alla III Conferenza Italiana sul Software Libero

SAVE

DELETE

BACK TO EVENT

### Properties

translation to:

status:  ON  OFF  DRAFT  TO DO

### Title

title:

description:

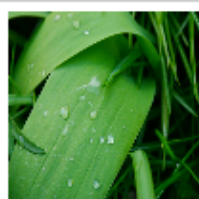
### Long Text

### multimedia descriptions



Title

Description



Title

Description

### Properties

master language:

status:  ON  OFF  DRAFT

### Original Title

title:

BEedita alla III Conferenza Italiana sul Software Libero

description:

>Lorem ipsum dolor sit amet

### Long Text

### multimedia descriptions

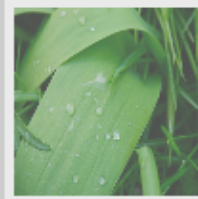


title

Mare e dune

description

lorem ipsum sit amet



title

RainDrops.jpg

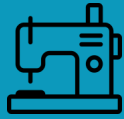
description

User: ChannelWeb  
Global User

› Home

› Exit

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ChannelWeb and  
Chialab 2006-2009  
› www.bedita.com



# Features

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**i18n:** contents & UI in every language (ISO-693-3, gettext, custom structure, dedicated module)

**object design:** every type may be (geo)tagged, categorized, translated, published on different nodes...; videos, events, newsletters, cards...

**obj extensions:** create new types, or new custom properties to existing types

**modularity:** software modules for specific tasks and to handle different types



# Features (more)

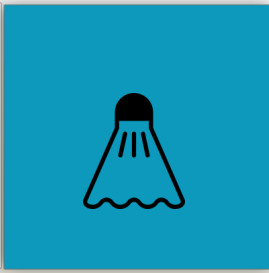
- free **semantic relations** between objects;
- **authentication**: internal or external (like LDAP, OpenID)
- dedicated **newsletter** module
- integrated **statistics** , on contents and publications (external providers like Google analytics, webserver log)
- **access granularity**: users and groups (dynamic privileges)
- **XML/REST** (JSON) native interface for published objects
- **nicknames** : unique alphanumeric semantic ID for URLs/apps



# Strength

- Clean separation between backend and frontends
- Clear framework nature
- Extensible object design
- Reuse: web app frameworks and other libs..
- Advanced i18n
- Elegant, ergonomic, powerful web2.0 backend UI
- Free semantic relations
- *Enterprise* features on LAMP architecture

A unique or rare set of features.... almost....or??



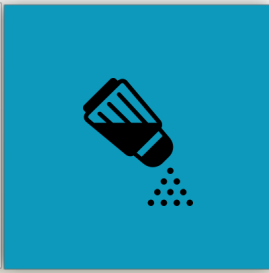
# BEdita vs (for example) Wordpress

## **BEdita advantages:**

- many object types, real obj design, semantic relation richness
- native multi-publishing
- gerarchic tree publishing structure (not just pages)
- native i18n, dedicated module – frontend automatic localized display

## **Wordpress advantages:**

- some editing features (concurrency, versioning) we're working on it...
- many 3rd party plugins/modules; more export/import filters
- documentation, many easy-to-find web resources
- simpler system, more intuitive/rapid to understand, ready-to-go frontend,
- different target (not jus designer/developer)



# Third Party

## Requirements:

**LAMP** architecture, Linux & Apache recommended on productions systems, only cross-platform components (Mac/Win/UNIXes...); **MySQL5** : referential integrity, views, stored procedures; other DBMS theoretically supported...; **PHP5** : OO syntax, extensive use of exceptions;

## Bundled software:

**CakePHP** : new webapp framework, like RubyOnRails; provides MVC, i18n/l10n, OR Mapping, UnitTesting, DBmigrations, security, caching, validation; **Smarty** : PHP templating library (MVC View); **jQuery** : Javascript library - AJAX, drag'n'drop, DOM manipulation; many other .... like phpThumb , TinyMCE



# Standards

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- classic W3C web technologies standards
- Dublin Core: metadata for objects/contents
- RSS /Atom automatic feeds generation
- Sitemap: automatic map generation, new sitemap protocol
- REST: webservices *like* – not SOAP (in the future?)
- CMIS: Content Management Interoperability Services, OASIS interop. standard (draft) between CMS (work in prog.)
- OpenDocument: import/export filters (work in prog.)
- Other lower level standards: ISO 639-3, UTF-8



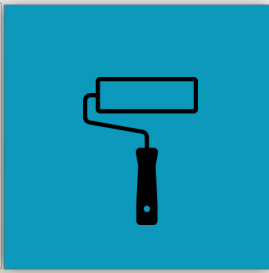


# BEdita Applications

**Web:** companies, public administrations, projects, campaigns, portals ; > *webagencies, communication, marketing, software house, system integrators;*

**publishing** : online vertical applications (books, magazines, newspapers, tv/radio); > publishing companies

**dedicated vertical solutions** : specific fields/domains where e.g. festivals/events/fairs management; > consulting and services companies (main ICT), startups;  
new web services – any cool idea? > startups;



# Licensing

BEdita: dual licensing business model

**Affero GPLv3 license:** a relatively new license, created for software on the net (our case), resolving the ASP loophole problem.

**Proprietary version:** same software with a few vertical add-on modules (publishing and e-commerce).

A clear choice to users:

- choosing AGPL license: all free software rights, but same license for apps published on Internet (source code available);
- choosing proprietary license: I may publish my Internet applications not under AGPL, also vertical proprietary sw;



# Dissemination

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No real community on the project (aside from companies employees), limited Affero/GPL use, main reasons:

- in house development for more than 2 years; schema may change on feedbacks/contributions we're having
- first free version published march 2009, dissemination activity just begun (web, conferences, reviews....)

In the next months, at the end of 2009, we will evaluate dissemination results: use and participation on the project will change, hopefully rise...



# Roadmap

AGPL version roadmap:

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1. june/july 2009 - first stable realease, bugfix, current features tuning, performance optimizations;
2. autumn 2009 - 3.1 release – better concurrent editing, web installer, caching and object versioning;
3. spring/summer 2010 – 3.2 version – permissions on objects extension; introduction of some NLP (Natural Language Processing) techniques for categorization and automatic association of semantic relations.



# Thank you!

See you on

[www.bedita.com](http://www.bedita.com)

Contact us

[info@bedita.com](mailto:info@bedita.com)

Or just me....

[s.rosanelli@channelweb.it](mailto:s.rosanelli@channelweb.it)



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