# A novel collaborative website and artworks database management system for artist-run centers

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#### **Abstract**

Artist-run centers and artists collective workshops are renowned places for collective management and artistic production. Nevertheless, their means of public visibility (i.e. internet web sites) are frequently managed by a few qualified individuals due to their complex fusion of content and layout. Thanks to the advent of recent technologies, the distinction between contents and layouts can be carried out. Further, the production and update of contents are facilitated for all users. A new type of Internet site can be set up in order to allow every artist and coordinator to contribute to the digital online content. Personal virtual portfolios and individual galleries may be uploaded for each artist, making it possible to permanently update the visible bank of artworks online. In addition, it offers a simple backyard system for personal management of their creative artwork. A graphical user interface enabling the management of temporary exhibitions combined with automatic RSS feeds allows for simple and timely updates. This article presents the proposed methods and graphical user interface, as well as the tools installed on an Internet site and backyard system. This study is currently being conducted with the "Atelier Circulaire", an artist-run centre in Montreal, Canada, which groups approximately 100 etching artists.

Keywords: content management system, website, collaborative, artist-run centers

# 1. Introduction

Artist-run centres and artists collective workshops are renowned places where management and artistic production are collective. They gather a community of artists in the same place, sometimes following the same artistic movement or using the same medium. Usually this gathering has some financial positive impact, allowing to share some expenses such as space rental, gallery editions, material supplies etc. Beyond those aspects, these centres also share an important social identity where every artist supports others and the collective workshop organization, by sometimes volunteering and by adopting a responsible behaviour.

Nevertheless, their means of online public visibility (i.e. internet web sites) are frequently managed by a few qualified individuals due to their complex fusion of content and layout and the fact that web programming is not an artist first concern except for some new media artists. Hence such websites updates may be somehow erratic and not frequently addressed.

Moreover, they also do not well represent the artistic and social profusion of their community.

This article presents a content management system adapted to artist-run centres. The distinction between contents and layouts is carried out in this system. The production and update of contents are facilitated for all. Every artist and coordinator can contribute to the digital online content. Personal virtual portfolios and individual galleries may be uploaded for each artist, making it possible to permanently update the visible bank of artworks online. In addition, it offers a simple backyard system for personal management of their creative artwork. A graphical user interface enabling the management of temporary exhibitions combined with automatic RSS feeds allows for simple and timely updates.

This study is currently being conducted with the Atelier Circulaire, an artist-run centre which groups approximately 100 etching artists. The developed system is being evaluated in the perspective of its 25<sup>th</sup> anniversary in 2008. The plan of the paper is as follows. Section 2 briefly introduces the Atelier Circulaire and printmaking centres issues. In Section 3, some relevant previous works are cited. The framework of the overall system is described in section 4. Some perspectives and concluding remarks are eventually given in Section 5.

# 2. Printmaking centre issues

Atelier Circulaire is a 25 years old artist-run centre located in Montreal Canada [2]. It groups approximately 100 artists. This centre is devoted to printmaking techniques: engraving, etching, lithography, typography and almost all printings processes. Artistic printing techniques often need some very heavy, voluminous and expensive material: printing-press, acid baths etc. Therefore, printing artists often join in some artist-run centres. Motivation is partially financial but also in sharing some techniques, opinions and collective advises. Many printing artist centres exist around the world, and artists doing internships in different centres learning and exchanging techniques is not an uncommon situation [1, 6].

This active and large community hence has a strong supporting spirit. This illustrates the important gap between this social organization and the lack of collective online content production. Online content is often managed by a one qualified and partially employed individual due to the complex fusion of content and layout and financial constraints. This framework has several limits. Updates are cumbersome and thus require a considerable amount of time to proceed. This limits the dynamism and willing to regularly expand the

website information content. It also has a strong negative impact on the website audience which is one important tool for public visibility.

## 3. Previous works

Content management systems (thereafter called CMS) have emerged for around ten years on the web [5]. Since then, hundreds of CMS have been proposed for general and specific purposes, commercials and open-source, and all kind of applications [11]. They have also been applied to a few digital libraries and museums. Yet each cultural institution (universities, museums, private collection) may have their specific needs [10]. When they are fulfilled, cultural institutions indeed benefits from suited CMS implementation [15].

Several approaches are document-oriented. Yeh et al. proposes a two-tier knowledge management system which focuses its attention on hyperlinks maintenance and temporal information uses [7]. Depending on the audience specific needs, document style transformation can also be handled by CMS [8,10] using structured approaches based on XML/XSL standards. Another approach used by a CMS called MMBase is object-oriented [12]. This type of approach is especially suited for very big websites (+1000 pages) and one needs minimal database knowledge to be able to easily contribute to the content. A few CMS have been proposed toward learning and educational user needs in universities [14] and museums [13].

Our approach differs from previous works on several aspects. First it is a full web-based CMS using a relational database specifically designed for collective cultural institution. To the best of our knowledge, this is the first attempt applied to this specific area. The system is able to produce some XML files but only in the scope of RSS feeds. Secondly it is allowing authorized users to contribute with text and also image information. Authorized accounts allow them both expanding the website content, and manage their own collection as a classic backup storage using the same tool.

# 4. Framework

The system is composed of a public website and a web-based backyard CMS [5] aimed at two contributor categories: artists and administrators. Artists are in charge of their personal virtual portfolios. A portfolio is an organized collection of digitized artworks. Administrators are in charge of the following online website contents: information about the artist centre, news and events announcements, and virtual temporary exhibitions. They also manage the portfolios permissions.

The system is implemented with an online interface using the so-called Linux-Apache-MySQL-PHP (LAMP) platform. The relational multimedia database is presented on Figure 1. Data are stored using nine *relations* using the MySQL framework. They are queried, compiled and transformed using cascading style sheets (CSS) and PHP script language trough the front and back interfaces.

In the specific case of Atelier Circulaire, it integrates an access to an intern image repository called "Centre Collection" gathering around 1000 artworks from the permanent collection of the centre. The system support English/French contents, users and visitors.

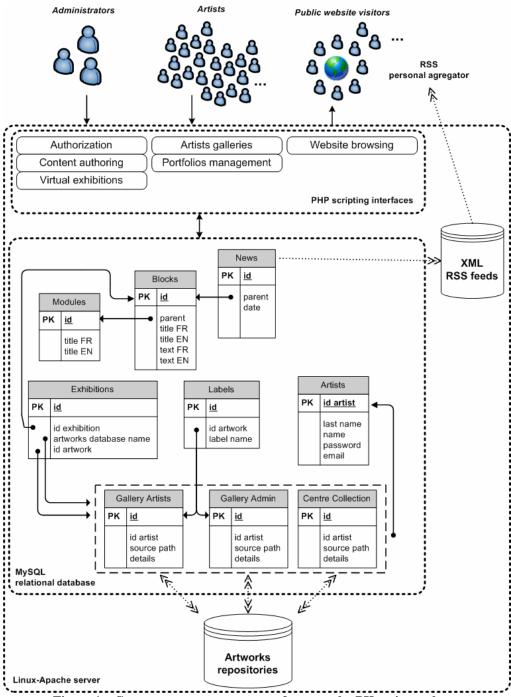


Figure 1 - Content management system framework. PK=primary keys.

### 4.1. Textual contents

General descriptive information about the collective workshop such as mission, history, courses, and events are gathered in modules and blocks which are modules sub-items (tables

**Modules** and **Blocks** on Figure 1). These tables are managed by the administrators. Textual content edition uses a WYSIWYG (*What you see is what you get*) licence free online interface called FCKEditor [3].

#### 4.2. Virtual exhibitions

Administrators can create and manage some online exhibitions. Every virtual exhibition is considered as a peculiar block in the relational database with a list of artworks from the three repositories (Tables **Gallery Admin**, and **Centre Collection** on Figure 1). These repositories can be expanded with more artworks and metadata. These images databases can also be organized with a labelling system (table **Labels** on Figure 1). Labels are equivalent to folders organization except that it is possible to add more than one label to one item (see Figure 3 for label examples on the artist interface).

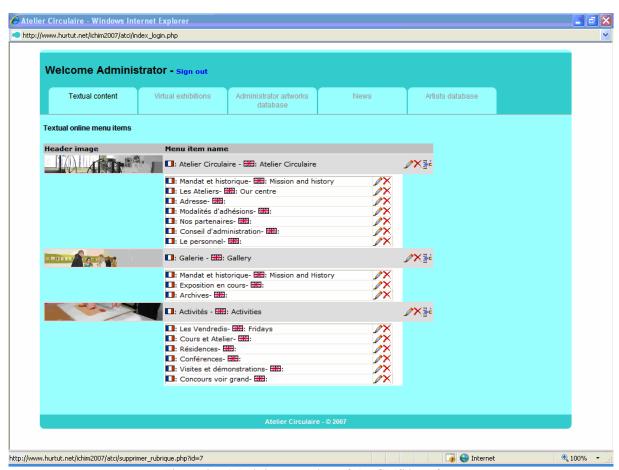


Figure 2 - Administrator view of the CMS interface

#### 4.3. **News**

An events module (table **News** on Figure 1) allows the administrators to announce centre events, website modifications and every thing that should be known by regular visitors. The item is automatically syndicated into a RSS feed, also called Atom feeds. Those feeds are XML structured files that allow distant and anonymous subscriptions. Users are kept informed

with the updates of the website directly through their aggregator without giving their email address. If a visitor is not familiar with RSS feeds, a form invites him to give its email address.

# 4.4. Artist portfolio

The table **Gallery Artist** on Figure 1 represents all the portfolios of the artist. It can also be organized with labels. Artists sign in their personal portfolio and upload or download some of their artworks in the system. They can describe them with metadata. Hidden functions controls and limits image sizes, and compute automatically thumbnails for each artwork. The portfolio allows the artist to gather and manage his work online. It creates a backup solution, easily accessible from everywhere.

The artist decides if each artwork should be visible on the public website. Hence every artist expands by himself the website content which addresses artist galleries. This aspect is usually a basic drawback of collective galleries updates.

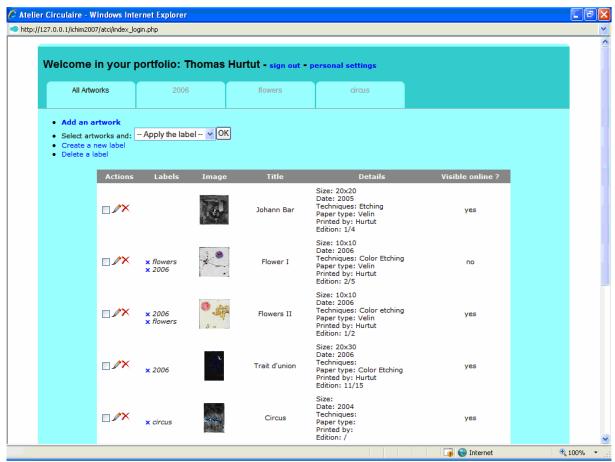


Figure 3 - Artist view of the CMS interface

# 5. Conclusion and perspectives

We proposed in this article a simple content management system designed for collective artist-run centres. Content management systems break the model where a Webmaster is at the centre of a system managing the layout and controlling the content updates. Artist-run centre websites benefits from such systems. Updates are easier and feasible for all those who contribute to the centre profusion but who don't have web-programming knowledge. Besides, technical aspects can be handed down to one person who can concentrate on the operating constraints.

Besides the fact that its framework is specifically designed for collective run-centres, the main key feature of this system is the ability to manage image repositories through a web interface accessible to artists. This interface permits content publishing through online artist galleries. It also creates a personal organized stored portfolio for the artist. Secondly, content authoring, management and syndication are accessible to administrators.

A demo of the overall front and backyard system is available online [4] for the conference audience. It allows the reader to explore the system features. Besides it can be downloaded as an Open Source GPL system and is under constant improvements. Perspectives include a more detailed and flexible metadata definition. Document style management and page theme module will also be integrated in the administrator interface. Practical uses will eventually be evaluated to see if it meets their requirements.

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