CoCoFlash: Conzilla, Confolio, and FlashMeeting Integration for Enhanced Professonal Learning

Ambjörn Naeve, Matthias Palmér, Mikael Nilsson, Fredrik Paulsson, Kevin Quick, Peter Scott
Knowledge Management Research group at KTH, Sweden,
Knowledge Media Institute at the Open University, United Kingdom
{amb, matthias, mini, frepa}@nada.kth.se, {k.a.quick, Peter.Scott}@open.ac.uk

Abstract

This paper describes the integration of the Conzilla concept browser and the Confolio portfolio management system with the FlashMeeting videoconferencing tool. The result of this integration is expected to produce a combined tool, CoCoFlash, which can support a powerful e-learning model.

1. The three separate tools

The *Conzilla* concept browser (www.conzilla.org), is a knowledge management tool developed by the KMR group [2], [3], [4]. Conzilla is designed to create overview of complex information structures by supporting the construction, navigation, annotation and presentation of the information structure in the form of a *knowledge manifold* [1].

The Conzilla "mantra" is *content in contexts through concept*, which means that a *concept* should be regarded as a delimiter between its *inside*, which stores its *content* and its *outsides*, which represent the *contexts* (maps) in which the concept appears. A concept can be made news-sensitive, and highlighted when its content has changed since it was last viewed.

The *Confolio* portfolio management system (www.confolio.org) [3], is developed under the coordination of the KMR group. It provides a directory structure into which documents can be uploaded and links stored and retrieved with semantic search. The Confolio tool enables the annotation, commenting, and access control of all items in its folder structure – including the folders themselves. It also supports an "opinion publication network", where annotations on material in other Confolios can be published and stored in one's own Confolio.

Both Conzilla and Confolio are based on Semantic Web technology.

Annofolio is a system for adding metadata mark-up and annotations to parts of a resource through the use of xPointers and the Annotea W3C recommendation [6]. The basic principle is that the user marks an optional portion of, for example, an XML text document in the browser. Annofolio calculates an xPointer to the marked part of the resource and exposes a metadata editor that allows the user to add metadata. The metadata can consist of anything from metadata according to a specific application profile, to a simple annotation. Through the Annofolio system, the Confolio supports annotations of individual parts of resources. The metadata is stored as RDF statements in a SCAM repository [5] together with the URI that points into the right part of the "annotated" resource.

The OU's *FlashMeeting* videoconferencing tool (www.flashmeeting.com) has proved very successful, being used for over 2000 meetings. One of its major strengths is the recording of meetings and the ability to replay them together with visualisations of the proceedings of the meeting. FlashMeeting works in a web browser running the Flash 7 plugin. Registered users book meetings using a simple web form. The system automatically returns to you, the booking confirmation and 'ticket' you need to pass on to the people that you want to join the meeting.
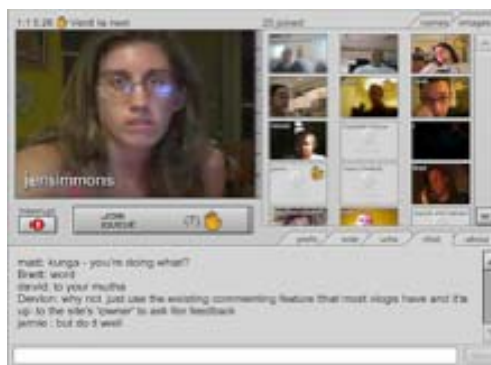
Screenshot of a FlashMeeting

2. The combination: CoCoFlash

The combination of these technologies – *CoCoFlash* – will provide a tool for: (1) analyzing and describing different conceptions of the world around us (Conzilla), (2) recording live discussions and collaborative explorations of context-maps for cognitive reflection (FlashMeeting), (3) annotating and commenting on selected parts of the FlashMeeting recordings (Confolio).

2.1. ConceptMeeting: Conzilla-FlashMeeting

A "context-map player" will be integrated in FlashMeeting so that a person, while talking, can navigate and present an exploration of context-maps. This will probably demand a flash-version of Conzilla that could make use of the Conzilla proxy-server developed by Fredrik Enoksson of KMR. (http://knowware.nada.kth.se:8095/mywar/MasterThesis2.pdf)

2.2. MeetingFolio: FlashMeeting-Confolio

Through Confolio, we will create multiple entry-points into the recording of a FlashMeeting in the form of a folder structure with access to: (1) every point where someone starts talking, (2) all the URLs that have been broadcasted, (3) the chat-log separately, (4) descriptions of all participators, (5) all context-maps that have been presented.

During the meeting, CoCoFlash will provide access to a Confolio structure in order to enable: (1) access to background material that has been uploaded before the meeting, (2) the exchange of documents during the meeting, (3) access to URLs that people have sent before the meeting, (4) writing and storing comments (annotations) on what is being said during the meeting.

As soon as someone starts talking, a "speech-object" will be created in the FlashFolio, so that participants can annotate it directly. These speech-objects will be listed (and available for direct annotation) under a separate FlashMeeting tab. Note the difference with respect to the present FlashMeeting chat, where the comments are not directly connected to what is being said.

Using the Annofolio technique it will be possible to connect a speech-object with parts of the background material so that one can – in retrospect – listen to individual parts of what has been said in a meeting and get access to "deep links" into material (texts, concepts, context-maps) that was discussed at the corresponding point of time.

3. A testbed for CoCoFlash

Within the *Prolearn Virtual Competence Centre* (www.prolearn-online.com) CoCoFlash will provide news-sensitive contexts of interest for the professional learning community, including distributed storage and subscription-based news feeds of relevant contextualized material. CoCoFlash will also be used to record meetings and interviews with experts on professional learning. The members of the VCC will be provided with their own personal or organizational confolios, and through RSS-feeds they will be able to selectively subscribe to information that any other member chooses to upload, as well as be notified when this information has changed. Moreover, each member will be able to publish comments on selected parts of the material submitted by any other member. This will create an "experience network" that can highlight contributions of high quality and make explicit how members make use of their shared information. In this way we will build a community-wide archive of best practices.

4. References

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