

# Custom Notifications

**Saul Greenberg and Michael Boyle**

Department of Computer Science  
University of Calgary  
2500 University Drive NW.  
Calgary, Alberta, CANADA T2N 1N4  
+1 403 220 6087  
saul.greenberg@ucalgary.ca

*Cite as:*

Greenberg, S. and Boyle, M. (2006)  
[Custom Notifications](#). Video Report ilab-2006-01, Dept. Computer  
Science, University of Calgary. Duration 6:54.

## Abstract

This video illustrates a method that lets people create a visual history of custom notifications to track personally meaningful changes to web pages. Notifications are assembled as a collage of regions extracted from the fully rendered (bitmap) representation of the web pages. They are triggered when visual changes between successive visits are detected within regions. To use the system, a person specifies a notification by clipping personally interesting regions from the bitmap representation of a web page and reformatting them into a small collage. The person then specifies regions on the page that will be monitored and compared for visual differences over time. Based on this specification, the system periodically revisits the page in the background on behalf of the user and automatically generates a notification (the collage plus a title and timestamp) when differences are detected. Finally, the person views the generated notifications in several ways: as only the most recently changed version (to illustrate current state), or as an image history that can be individually browsed or played back as a continuous video stream.