### **Accessible Blog Posts with Windows Live Writer**

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### **ABSTRACT**

Windows Live Writer is a desktop application for publishing to blogs. This paper demonstrates the ways in which Writer enables blog authors to publish accessible HTML to blogs without extra effort, knowledge of HTML or awareness of accessibility.

### **Categories and Subject Descriptors**

D.0 [Software]: General, H.1.2 [User/Machine Systems], J.7 [Computers in Other Systems]: Publishing, K.4.1 [Computers and Society]: Public Policy Issues, K.8.m [Personal Computing]: Miscellaneous

### **General Terms**

Documentation, Design, Human Factors, Standardization.

### **Keywords**

Windows Live, Writer, Microsoft, accessibility, web, blogs, publishing.

### 1. INTRODUCTION

Windows Live Writer is a desktop application for publishing posts to blogs and supports all blog service providers that support the most common API standards<sup>1</sup>. The purpose of Writer is to enable anyone to participate in the two-way web as authors and consumers of content. With that in mind, it is targeted at people with no HTML experience and therefore, intentionally designed to produce accessible content in the normal workflow of authoring a blog. In developing Writer, the design was focused on using defaults and prominently featuring controls that promote accessibility, while generating quality HTML that is semantically correct, valid, and clean.

Writer offers some unique advantages to today's bloggers. It is a more familiar environment compared to the various web, and script, based experiences of blog service providers. The most common productivity features found in similar desktop applications are present – for example: offline editing and spell

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checking. It supports Microsoft Active Accessibility for screen readers and other assistive technologies, Windows Settings such as high contrast and large fonts, and keyboard access. For that reason, Writer can serve as an accessible blogging solution for users with disabilities that may not be able to use the editing surfaces on blog sites. Most common obstacles and hidden nuances around inserting rich media into blogs posts are removed, enabling more people to create and share more compelling content on the web. Writer does all of this while showing exactly what the blog post will look like using the theme and styles of the blog. This eliminates the tedious "publish, preview, re-edit" cycle that is common in most blog authoring environments.

Today, Writer has been installed on over 20 million unique machines and about 100,000 unique users blog using Writer each day.

With that many customers, any advances that Writer makes in emitting WCAG-compliant HTML and increasing accessibility on behalf of blog authors can have a fairly large impact on the overall quality of HTML published to blogs on the web.

### 2. CHALLENGES

Blogging has become a common way of broadcasting and communicating on the web, and is often done by end users with little knowledge of the web, HTML or accessibility. The challenge for blogging tools is enabling authors to create semantically correct, and accessible, content as part of a normal workflow and in a way that doesn't require them to understand the intricacies of HTML or of accessibility. Adding complexity to the primary task of blogging, such as extra user interface, prompts, and help topics, is not a viable option with a consumer audience. Writer accomplishes this goal by using good defaults and prominently featuring controls that promote accessibility, and by generating semantically correct, valid, and clean HTML on behalf of the author.

It is worth calling out that overall accessibility blogs is determined by the combination of the accessibility of the site, in addition to accessibility of each blog post within the site. Poor accessibility of the blog site itself can compromise whatever good Writer does inside the post body.

### 3. ACCESSIBLE BY DEFAULT

Writer is designed to create accessible content within the normal workflow of authoring a post. Without any additional input from the user the output of the application is as accessible as it can be. Therefore, everyone from novice to expert authors can publish

This includes Really Simple Discoverability (RSD), the Metaweblog APIs, the Atom Publishing Protocol, and the Movable Type APIs.

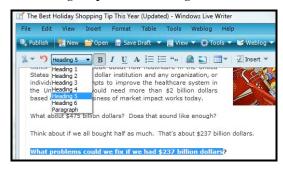
accessible content to blogs using Writer. Writer achieves this design in three ways:

- Placing controls that promote accessibility prominently in the application
- Generating high quality HTML that is clean, valid and semantically correct.
- 3. Applying defaults that promote accessibility

## 3.1.1 Placement of controls: Heading and Text Formatting

The editing toolbar in Writer includes a dropdown for specifying heading and paragraph levels. This is the most obvious, and easiest, way in the user interface to change the appearance of text. It generates HTML heading and paragraph tags, which have rich semantics and can be interpreted by Assistive Technology. While many editing applications place direct font formatting, such as size and color, front and center in the application, Writer puts these out of the way in a formatting menu.

Figure 1 Heading Drop-Down of Editing Toolbar in Writer



### 3.1.2 High Quality HTML: Semantic Text Styles

The toolbar includes buttons for text styles. Where possible, these are mapped to equivalent HTML semantic tags: The Bold button inserts <strong> tags and the Italic button inserts <em> tags.

#### 3.1.3 High Quality HTML: Lists

The list buttons on the toolbar create clean html lists, using 
 or 
 and Lists do not include any extra HTML tags, hard-coded bullet characters, or other non-standard markup.

### 3.1.4 High Quality HTML: Tables

Writer is the only major blogging tool that provides functionality in the primary user interface for inserting and editing tables. The tables are created on behalf of the user, using HTML table markup. This enables authors with no knowledge of, or capabilities in, HTML to author semantically correct tables. Using other blog services an author must either:

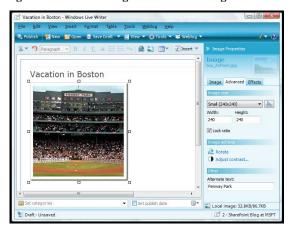
- Possess knowledge and capabilities for authoring tables manually in HTML.
- Paste a table from another source such as Microsoft Word. In this case the HTML is only as good as what the source generates.

# 3.1.5 Good defaults: Images and Alternative Text When an image is inserted, alternative text is defaulted to use the image file name, without the file extension. The philosophy

employed in the design of Writer is based on previous usability work, and guides choices that present editing tasks to the author over creation tasks. In this case the philosophy is applied to mean that users are more likely to change text that they perceive to be "wrong" than to create new text where there is none. Choosing alternative text on behalf of the user is better than excluding it because: (1) the full URL of the image, read by screen-readers in the absence of an alt attribute, is cumbersome and often contains a very long string of numbers (2) images frequently have descriptive file names that are suitable for use as alternative text, and (3) the absence of alternative text on these linked images would create an unnamed link.

The alternative text is surfaced in a modeless task-pane with other contextual tasks for editing the image, where it is easy for users to discover and change it as part of their normal workflow.

Figure 2 Default Settings for Inserted Images in Writer



### 4. CONCLUSION

Windows Live Writer is designed to create accessible content on behalf of the author. This enables everyone, from novice to expert authors, to publish accessible content to blogs using Writer. As a result, blog authors can focus on their primary goals, creating and publishing compelling content to their blog, with little resistance and without requiring extra knowledge or effort. With over 100,000 unique user publishing with Writer each day, we can expect a growing number of blogs to contain accessible content.

### 5. ACKNOWLEDGMENTS

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