

Most government agencies have developed and manage one or several Internet or intranet Web sites. As these Web sites grow in size, complexity, and importance, they create growing concerns for Web site management, content management, maintenance costs, and accessibility. Consequently, government agencies find it increasingly difficult to be responsive and flexible in providing new information and Web-based services.

Government Webmasters and system administrators have come to realize that the HTML-based technologies and strategies used in the past to build most Web sites work well for individual Web pages, but present serious challenges when managing complex Web sites. A Web architecture based on individual HTML pages does not

- provide a structure for easily maintaining entire Web sites,
- contribute to managing the workflow involved in Web content production and maintenance, nor
- facilitate the sharing and reuse of Web site content (see Figure 1; [click on figure to display a larger image](#)).

Figure 1. Web Publishing Workflows using HTML.

XML, however, is not based on individual Web pages; and in fact offers an innovative, long-term solution to many of the shortcomings of current Web site design tools and techniques because it structures Web content in a meaningful way. This creates a workflow characterized by a single source of standardized content (XML), rather than multiple copies of that content in multiple locations (e.g., Word files, HTML files, databases, desktop publishing files all maintained by different persons). In addition, supporting technologies (such as XSL) enable that Web content to be delivered efficiently in multiple ways and formats (e.g., HTML Web pages, PDF, mobile devices, RTF documents, etc.), while maintaining a single source of standardized content. This framework also enhances consistency of content across Web sites, eliminates unnecessary manual conversions of content from one format to another, and reduces the number of non-value-added, redundant checking tasks associated with the HTML-based workflow (see Figure 2; [click on figure to display a larger image](#)).

Figure 2. Web Publishing Workflows using XML.