

Preface



The Extensible Markup Language (XML) is an open standard for creating markup languages that describe the structure of data. Since the first working draft, under the sponsorship of W3C** (World Wide Web Consortium), was issued 10 years ago, XML has proliferated at a rapid pace, and it has become the predominant mechanism for electronic data interchange between information systems.

The success of XML is due to many factors. Because the XML message format is independent of the processing software, it enables interoperability between heterogeneous systems. Thus, one can add systems or change their function without having to change the messaging mechanism. Organizations that need to communicate join together to define XML languages and their associated schemas for data to be exchanged. Because XML is based on open standards and backed by a set of active standards groups, it is stable, interoperable, and extensible. The widespread adoption of XML is also due to the fact that XML works for so many kinds of information and purposes, including both Web and non-Web applications.

This issue of the *IBM Systems Journal* is anchored by a keynote paper, “Technical context and cultural consequences of XML” by S. Adler et al., which traces the evolution of XML and places the XML phenomenon in its technical context. The authors posit that the development of XML, which they refer to as a “code of integration,” constitutes a significant milestone in the history of computer science that will have significant economic, political, and cultural impact. They also preview the 12 additional papers in this issue, which are grouped under five

headings: core XML technologies, connecting to business data, connecting data to applications, mapping technologies, and connecting business to business with Web services.

This issue would not have been possible without the work of the issue coordinators, Sharon Adler and Roberta (Bobbie) Cochrane. They were essential in planning and producing this issue and were actively involved in paper selection, reviewing, and editing.

The next issue of the *IBM Systems Journal* is devoted to model-driven software development.

Alex Birman, Associate Editor

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