MIME: A Portable and Robust Multimedia Format for Internet Mail

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for *Multimedia Systems* journal

Abstract

Although multimedia systems are rapidly becoming more widely available and affordable, most present-day multimedia applications are not designed with interoperability in mind. Multimedia data from one application can be used in another only in relatively specialized circumstances or with special translator software, effort, and expense. While this situation is undesirable, it is not a critical impediment to the use of multimedia in many application domains. In others, however, the lack of interoperability is crucial, and nowhere is this more the case than for multimedia electronic mail.

MIME (Multipurpose Internet Mail Extensions), the new standard format defined by an Internet Engineering Task Force Working Group, offers a simple standardized way to represent and encode a wide variety of media types, including images, audio, video, and

non-ASCII textual data, for transmission via Internet mail. MIME extends Internet mail in a manner that is simple, completely backward-compatible, yet flexible and open to extension. In addition to enhanced functionality for Internet mail, the new mechanism offers the promise of interconnecting X.400 "islands" without the loss of functionality currently found in X.400-to-Internet gateways. This paper describes the general approach and rationale of the new mechanisms for Internet multimedia mail.