Abstract:
Periodic broadcasting is known as an efficient technique for delivering popular videos by reducing bandwidth requirement for transmitting streaming video to simultaneous viewers. The channel transition problem is a noticed issue to be concerned about the variability of popularity of video and resource management in periodic broadcasting. In this paper, we approach a general seamless channel transition scheme for pyramid-based broadcasting protocols and present the Stairway Channel Transition (SWCT) scheme. Compared to the existing schemes that are only designed for dedicated broadcasting protocols, our design possesses more flexibility. Otherwise, our scheme does not reduce the performance of the original protocols.