



SECTION Webcasting Guidelines

Our world is becoming increasingly virtual and accessible. The Internet enables dissemination of information on a scale that, not too long ago, was found only in science fiction.

As it becomes simpler to create and distribute information globally, format and accessibility issues become much more complicated. Without a deliberate and globally focused strategy for producing and distributing one of SMPTE's most valuable assets, technical knowledge, the risk exists of unintentionally devaluing SMPTE membership and diluting the powerful SMPTE brand.

To help, SMPTE Headquarters is building an online SMPTE professional community of practice that will serve to create a learning environment that is uniquely SMPTE! With careful cooperation between SMPTE Sections and Headquarters, we can continue to build SMPTE's reputation as *the* prime source of professional development and ongoing education in our field.

Ultimately, the goal is to ensure that all SMPTE webcasting efforts are coordinated and uniform in quality, branding, and approach without stifling creativity and innovation. With this in mind, SMPTE has established the following guidelines for Section use when producing training and other professional development content intended for webcast.

- Section meetings can be streamed in realtime using the SMPTE PDA Now "Audio plus Slides" platform with reasonable notice and when the platform is not already engaged. Starting this year, live video will be added to the audio and slide presentation capability of the platform. The allowable number of simultaneous participants on the platform is 100.
- When a Section webcasts a meeting live, SMPTE recommends the webcast audience be restricted to SMPTE members in order to avoid exceeding the 100-viewer limit of the online platform. Overage will result in a charge back to the Section for platform costs incurred when the number of seats used exceeds 100.
- SMPTE HQ will provide "ad-free" web access and streaming storage, within reason, for Section recordings at no cost to the Section. These recorded archives will be available from the SMPTE Professional Development Academy (SMPTE PDA) website to make it easier for the world to find Section recordings.
- To avoid outdated SMPTE content persisting on the Internet for a "virtual eternity," video hosting sites such YouTube, Google video, MySpace, etc., are not to be used for the near term.
- For the near term, Section produced videos will be available to SMPTE members and non-members alike. Archive videos must be clearly branded as SMPTE events, however.
- SMPTE HQ will circulate a standard copyright assignment form to be signed by subjects before any materials are publicly available. SMPTE HQ will also provide a PowerPoint template that will help to keep SMPTE branding more uniform.
- SMPTE HQ, in conjunction with the Section VP and Editorial VP, will create a Sections A/V Web Guideline document to clarify these points, and provide specific information on hardware, software requirements and web connectivity best practices.
- SMPTE HQ is currently exploring technologies and systems that will simultaneously capture video and audio of the presenter, along with slides, in realtime. The goal is to reduce post-production time for on-demand web viewing and to maintain consistent quality, branding, and a more uniform approach.

The goal of the above guidelines is a more strategic dissemination of SMPTE knowledge and resources in a way that enhances the value of *your* SMPTE membership while strengthening the SMPTE brand and the Society's reputation as the industry's knowledge leader.



By Peter Hammar, San Francisco Section Chair

Increasing the Society's Internet Presence

As the importance of the Internet increases, SMPTE's website, www.smpte.org, will help the Society reach the desirable target audience of increasingly "webcentric" young engineers and students, the next generation who will lead the industry and the Society in standards and education.

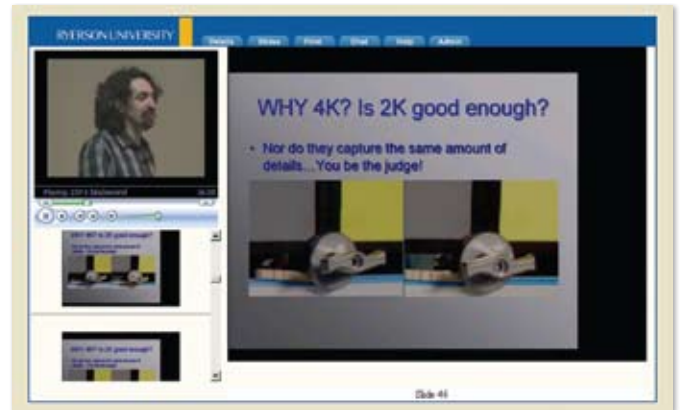
SMPTE is creating on its website a rich repository of technical knowledge about advanced imaging and related sciences. Besides content from national conferences and SMPTE's new Professional Development Academy, local Sections generate huge amounts of up-to-date technical information and insight through their monthly meetings and events. Twenty-five Sections around the world, each averaging 10 meetings a year, in five years will create nearly 1,500 tutorials. Properly captured, edited, posted, and linked, Section webcasts offer a useful resource for helping build smpte.org into an important "go-to" destination for engineers, managers, teachers, students, and journalists. The site's usefulness will be increased with enhanced metadata, including related documents, white papers, and links to the websites of other societies, universities, and corporations.

In addition to supplying smpte.org, webcasting helps Sections meet the challenge of reaching the next generation that increasingly gets its information online and less from physical interaction. The Toronto, Philadelphia, and San Francisco Sections have begun the move toward a more "virtual" SMPTE.

Toronto

For the past three years, the Toronto Section has led the way with both live and on-demand streams of almost all of their meetings to reach a membership that spans much of Canada. Their "Xstreamulator" system, developed by Jeremy Littler of Ryerson University, feeds the web, both live and archived, with the presenter's PowerPoint "slide" stack and a small video window showing the speaker. In its archival mode, a viewer can jump directly to specific parts of any presentation by selecting the appropriate slide in the Xstreamulator's slide-stack window. For his work on Xstreamulator, Littler won the 2008 SMPTE Lou Wolf Memorial Scholarship for studies in motion pictures and television.

Toronto Section meetings are normally held in the Rogers Communications Centre at Ryerson, equipped with web-streaming equipment used by the university, assuring continuity of SMPTE operations for both equipment and technical staff. They don't have to "reinvent the wheel" every month setting up equipment from scratch and working out bugs, which often happens with constantly changing live-webcast venues. Toronto is fortunate to have the support of the university and its staff, some of whom are SMPTE members.



SMPTE Meetings in a Box

Littler designed Xstreamulator—essentially "eventcasting in a box"—for simple and inexpensive operation, scaling to cover multiple presentation rooms with minimal bandwidth requirements and allowing delivery of live streaming content on crowded networks. Operationally, Xstreamulator requires little custom technology, running on a current-generation IEEE-1394 (Firewire) equipped laptop that runs the Xstreamulator software. The system allows the operator to select different video and audio sources and edit the show with minimal set-up requirements. Xstreamulator supports a range of bit rate settings, including multi-bit-rate profiles, from low-speed DSL (90 kilobits/sec) up to 400 kbits/sec. Toronto's SMPTE webcasts run at a default bit rate of 256 kbits/sec at 320 x 240 resolution. Users can edit the bit rate profiles to fit their specific delivery requirements.

In addition to regular live webcasts, the Toronto Xstreamulator archives and streams all programs for on-demand viewing. The system's "slide jumping" utility allows viewers to move to any slide that's shown in the stack, allowing individualized playback. Toronto has taken the portable system to off-site events, including the SMPTE conference in Brooklyn in 2007, the SMPTE and VSF Joint Conference in Houston in 2008, and the most recent SMPTE Conference in Hollywood. The collection of unedited conference streams provides a simple, permanent archive of events. The recent Toronto Section technical seminar used Xstreamulator as a live distribution tool for overflow audiences. The entire conference was streamed to an outside refreshment area so attendees could monitor the sessions, a popular element of the seminar.

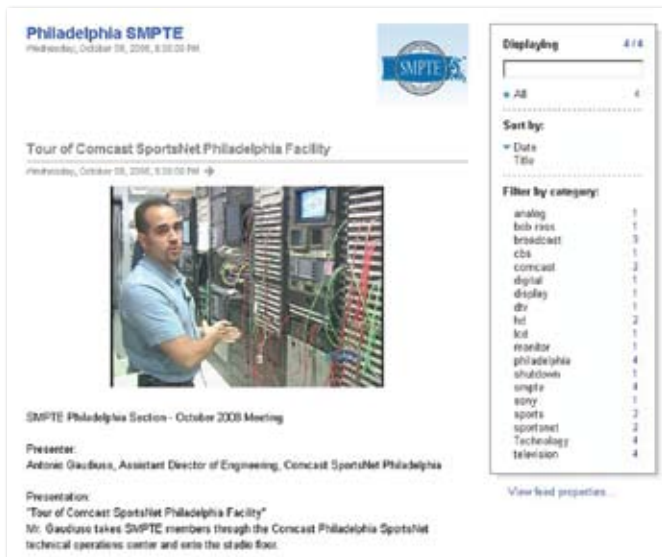
Toronto structures their meetings to stay within a relatively tight time schedule, holding questions until the end and keeping to a



minimum boring delays inherent in live webcasts. For their on-demand versions, Section officers plan to edit shows into smaller, “digestible” pieces better suited to the demands of Internet audiences. Toronto Secretary/Treasurer Mike Prest points out the need for consistency of audio and video quality and a common “look” from one streamcast to the next.

Philadelphia

The Philadelphia Section has established a useful online tool for accessing their webcasts and other Section resources at www.philasmpte.org/previousmeetings.html. Their latest November 2008, webcast went out on the live-streaming portal Stickam.com (www.stickam.com/philasmpte) and was also archived along with previous Philadelphia meetings for on-demand viewing on www.blip.tv. (In the Blip.tv search box, enter “SMPTE” for a list of shows, or go directly to philasmpte.blip.tv.) Section Chair Ken Herr and Program Coordinator Steve Tadzynski are planning regular live and archived meeting coverage from now on.



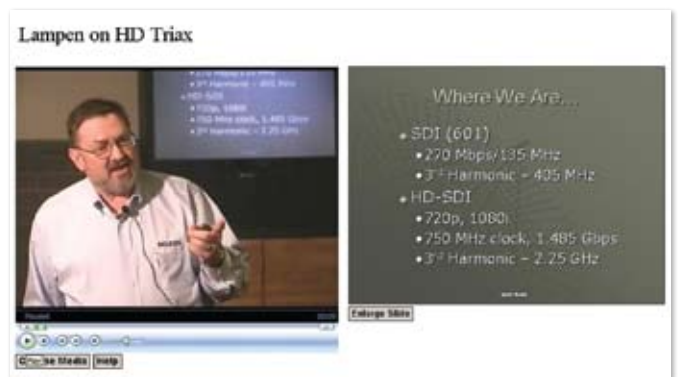
Herr, who is concerned about the effect of live coverage on meeting attendance, says he prefers the on-demand model over live webcasting. “A significant role of the Section,” he says, “is to meet the needs of their local membership, one of which is live interaction. Live webcasting could dilute this.” He says there is an advantage for members to be physically present and an attraction for presenters to be able to connect personally. “If we make all Section meetings available live on the Internet, we run the risk of undermining the very existence of local Sections.” On the other hand, he says edited, on-demand versions of events can be useful adjuncts to the live experience.

Herr says the video image of the presenter should be secondary to the PowerPoint slides and the audio, an approach reflected by the current “SMPTE PDA” audio-only with slides. If the webcast does include video, he believes a low data rate of 56 kbits/sec for 160 x 120, 15 frames/sec thumbnail images of speakers will satisfy most viewers, and that bandwidth should go first toward voice quality and PowerPoint visual clarity.

San Francisco

While “live” offers exciting immediacy and viewer interaction, most San Francisco (SF) Section officers prefer on-demand streams. For live-meeting streams, San Francisco has had problems finding free venues with reliable “fat pipes,” i.e., wide-bandwidth Internet access, even in the heart of Silicon Valley! Also, most SF presenters say they like edited, time-shifted events versus “going live” because they can review the final versions before they are posted. These speaker approvals have become a requirement for SF webcasting. A public gaffe or copyright violation is bad enough in front of 100, 50, or even 10 people in a room, but a mistake in a live feed to potentially hundreds of viewers around the world could be disastrous for the speaker and his company and even for the Society. SF Section leaders say on-demand, edited streams allow content control. Irrelevant material can be edited out, including accidental or inappropriate comments, copyrighted material, blatant commercialism, and boring interludes.

Taping for later webcasting can increase the importance of the live event for participants. Imagine how a Section manager and his guest speaker feel when they’ve worked hard to prepare a meeting and only 10 people show up. Even with a low audience attendance, knowing the show will eventually be seen by hundreds of people helps motivate both the speaker and the SMPTE organizer.



Producing a time-shifted, on-demand webcast is relatively simple: one of the Section's videographers, Steve Young of Videografix (www.videografix.com) or Tim Erskin of Erskin Productions (www.erskinproductions.com), shoots the show on two camcorders for later editing into one video stream that includes the PowerPoint slide stack. Most viewers interviewed say they find the PowerPoint images integrated into the single video stream quite readable, especially full size at 500 kbits/sec in a 640 x 480 picture. Unlike a live feed to the Internet, little can go wrong with "live-to-tape." When post-production work is completed, the videographer encodes and delivers the show to Tom Scott at Onstream Media in San Francisco (www.onstreammedia.com) or to another online service. Any playback option—WMV, QuickTime, or Flash—will work on at least one platform at almost any download rate.

Section Webcast Accessibility

Members and guests of all ages polled for this article said they would like to see SMPTE podcasts on the many Internet video outlets such as iTunes, Veoh, AOL TV, Blip TV, and YouTube that reach a wider variety of cyberspace audiences than the smaller number who may discover Section videos on smpte.org. Blip.tv already syndicates the Philadelphia Section videos for free to AOL Video, MSN Video, Yahoo, and iTunes.

Some respondents expressed the fear that SMPTE could "lose control" of streams posted outside of smpte.org. Others say, once written or streamed material is posted on any website, even behind a restricted, members-only "garden wall," that content is still easily susceptible to copying and manipulation. Proponents say the benefits of widespread Internet outreach outweigh the perceived risks or negative impact on the value of membership.

Impact on Live Attendance

As live and on-demand webcast viewing of Toronto events increases in popularity among members and guests, Toronto Past Chair Peter Armstrong and Secretary/Treasurer Mike Prest report a slight decline

in physical meeting attendance, although more time is needed to determine cause and effect. Realizing webcasting might reduce live participation, some of those polled countered that SMPTE should also try to reach the younger generation who prefer to get their technical information from the Internet at a time and manner of their own choosing and not only at physical, live meetings. As with any new "disruptive" technology, Internet webcasting of Section meetings will require compromises.

Toronto organizers have found resistance by a few presenters to both live and on-demand webcasting. In addition to possible feelings of "stage fright" with large, unseen virtual audiences, Prest thinks speakers may be concerned about using copyrighted clips "on the air," although the legal use of that material may also be restricted in live SMPTE presentations. Sections should always monitor their copyright compliance in any medium.

Dependence on Volunteers

For their Internet work, a few fortunate Sections benefit from friendly corporations and universities, but for many, successful and consistent webcasting may depend more on contractual reliability than luck. Toronto is indebted to Ryerson University and San Francisco to Tom Scott and Onstream Media, who have generously hosted webcasts. However, the realities of corporate life and a changing economy mean this free support could be withdrawn at any time. Using web presence to attract a new generation of webcentric members to the Society whom we might otherwise miss in today's competitive clutter may offer one of the best long-term investments the Society can make.

To view the first few posted Section meetings from Toronto, Philadelphia, and San Francisco, please go to www.smpte.org/.



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