

Archived and Online Meetings



By Paul Gruhn, PE
Houston Section Secretary and Past Web Master
pgruhn@landmengineering.com

The Houston ISA Section has been archiving monthly meetings online since late 2001 and broadcasting meetings live over the Internet since mid 2002. A number of Section, District and Division leaders have expressed interest in trying this and asked what was required. This article will describe three methods for archiving and broadcasting meetings.



Figure 1: Olympus W-10 digital voice recorder

The easiest and lowest cost solution is to simply record the audio of the meeting. This requires a digital recorder with computer download capabilities. Olympus makes several models starting around \$100 (see Figure 1). Such recorders are also great for recording board meeting minutes. Once you download the audio file to a PC, you can edit it and convert it to a streaming format that others can access through a web browser. Your Section Web Master should be able to figure out the details. Posting this along with the speaker's PowerPoint file allows anyone to view the visual content and hear the audio at their leisure. The Houston Section has a dedicated page for each monthly meeting (including photos and an e-mail link to the speaker if there are questions). We store the files for an entire year. The pages are then overwritten with the new meeting the following year.

The first question you may have is, "What's the point?" Simple! Think of all your members who either can't – or don't want – to attend meetings. Monthly meetings may be too far away, too expensive (for a meal they may not want), members may not wish to be 'hassled' by a vendor-heavy audience, or they may simply have other professional or personal commitments. For those who wish to attend the meeting, but can't, there are several solutions. Ranging in terms of complexity and cost, from cheapest and easiest to most expensive and difficult, are; 1) audio archived meetings, 2) live broadcasting via telephone conference calls, and 3) live broadcasting over the web.

Option 1: Archived Audio



Figure 2: Sony WCS-999 wireless microphone

While the recorders utilize a built-in microphone, you will want to utilize either a wired lapel mic (which would require the speaker keep the recorder in a pocket) or a wireless lapel mic. Sony offers a good wireless lapel microphone for approximately \$150 (see Figure 2). The Houston Section opted for the wireless mic which allows someone to closely monitor the recorder while in use.

Storing streaming audio and PowerPoint files online requires a fair amount of server space. Both types of files can range up to 5 Meg in size. If your Section, District or Division utilizes the ISA servers, you can either a) request more than the standard 10 Meg of space, b) only store one or two meetings, or c) utilize a non-ISA server with more storage capacity. The Houston Section opted for the latter.

Option 2: Telephone Conferencing



It is also possible to broadcast meetings live to remote locations. The easiest and lowest cost method to accomplish this is to place the speaker's PowerPoint file online ahead of time (for others to download) and broadcast the audio using a telephone conference call. Since the speaker obviously won't be able to hold a telephone headset while talking, you'll need to connect a wireless lapel microphone (discussed above) to the phone system using some form of audio bridge. JK Audio makes such a device for \$225 (see Figure 3). Many organizations already have and are familiar with telephone conferencing capabilities.

Figure 3: JK Audio Bridge

Option 3: Web Conferencing



Figure 4: 3Com web camera

It is also possible to broadcast meetings – including video – over the web. You can broadcast video, audio, share applications (e.g., PowerPoint), and utilize text chat (for Q&A). This is the most costly and difficult option. If you wish to broadcast video (which will require everyone have a high speed connection), you will obviously need a web camera. There are many different brands, most under \$100 (see Figure 4). If you only wish to only connect to one other site, you can simply use NetMeeting, which is bundled with Windows. NetMeeting can share applications (e.g., PowerPoint) and allow text chat

with multiple connections, however video and audio are point-to-point (i.e., between two computers only). This limitation can be overcome by utilizing conferencing server software. This software is both expensive (over \$3,000) and very complex. Most IT people are not even familiar with conferencing software and how to set it up. The Houston Section utilized a paid outside

consultant, and the setup was still not without problems. In addition to the software, you will need to do all this on a dedicated server. The Houston Section leases a dedicated server for approximately \$125/month. This gives us total freedom for what we do with our machine and web pages.

Problems

There is one considerable drawback to web broadcasting – firewalls. Many organizations have firewall security features set up that will not allow video and audio through. There are instructions within the Help system of the conferencing server software (as well as online) for IT administrators to allow the functionality through, but our experience has been that they won't. This severely limits who can attend an online meeting, especially during work hours. However, this is generally not a problem for evening meetings when recipients can connect from home (with a high speed connection).

While this final option is the most expensive, it is possible to recover some costs. One option is to have attendees pay for connecting. Another option is advertising. A vendor can sponsor a meeting and have the first PowerPoint slide (viewable until the meeting starts) serve as an ad. Another option is to utilize the broadcast capabilities for training. Similar to a monthly meeting, some attendees for training can attend in person, others remotely. You could even lease out the capabilities of the server to others.

Other Options

The three options covered above are certainly not the only choices. ISA headquarters utilizes third party software for its web seminars. This avoids firewall and high speed connection issues (as there is no video, and audio is through a telephone line), but the licensing costs are relatively high. Other solutions require everyone purchase a proprietary software package, which many may be reluctant or unable to do.

Experiences

The experience of the Houston Section has been that the archived audio and PowerPoint pages have been heavily utilized. The web broadcasting meetings have been poorly attended online. This is due both to firewall issues and lack of publicity with our members. We will be writing articles in our local newsletter to tackle the latter issue. We utilized our local section e-mail list server to publicize the capabilities in the past, but only one third of our members belong to the list. We will utilize the telephone conferencing capabilities for the first time at our next meeting (which will be held at a local engineering firm with a 'tight' firewall). We believe this to be the solution with the biggest bang for the buck. Even if you do broadcast live, you should still archive the audio and PowerPoint for those members unable to attend. The speakers appreciate this capability as well, as they can refer other interested parties to our site for an entire year after their presentation.