



Placing a streaming video/audio clip on your website

The instructions in this document assume that you use the latest Internet Explorer (IE) or Firefox. They also assume that

1. You have an audio or video file of the Real Media type (i.e. with .rm, .ra, etc. extensions).
 - i. Instructions for digitizing, editing, and compressing audio or video in Real format are provided elsewhere. Briefly:
 - ii. To capture audio from CD, you can use Real One Player available for free at <http://www.real.com/> or iTunes available from Apple Computer. Please adhere to DePaul's Copyright and Fair Use Policy (<http://policies.depaul.edu/policy/policy.aspx?pid=263>).
 - iii. To edit audio already captured or to capture and edit audio from a microphone, a cassette, or another source connected to your computer, you can use Audacity available for free at <http://audacity.sourceforge.net/>.
 - iv. To capture and edit video, you can use Windows Movie Maker or Apple iMovie included in your operating system.
 - v. To compress audio and video files for streaming over DePaul's Streaming Media Server, use *Helix Producer Basic* available for free at <http://www.realnetworks.com/products/producer/basic.html>.
2. You have a streaming media server account. Streaming media server accounts are handled by ITD. Complete and submit a request for a streaming media server account at: <http://www.itd.depaul.edu/website/forms/streamingmedia.asp>.
3. You have a SFTP program such as SSH Secure Shell, Fugu or Cyberduck. SSH Secure Shell is installed on your DePaul computer and instructions are provided at <http://www.itd.depaul.edu/website/documentation/UsingSSH-QG.pdf>. All Faculty Lab computers have SSH Secure Shell installed. Mac users should have an SFTP application such as Fugu (<http://rsug.itd.umich.edu/software/fugu/>) or Cyberduck (<http://cyberduck.ch/>) installed.
4. You have some basic knowledge of managing files in Windows (i.e. by using 'My Computer' and/or 'Windows Explorer') or Mac OS X, and of making web pages (i.e. by using HTML, DreamWeaver, Homesite, BBEdit, TextEdit, etc.). For help with these topics contact ITD at itd@depaul.edu.
5. You have experience using Blackboard. For training, sign up at <http://www.itd.depaul.edu/website/faculty/Training/GroupClasses.asp>.

Instructions

1. Using SSH (or SFTP) place your audio/video file (i.e. YourFile.rm) on the Streaming Media server in the folder of your choice and make note of the URL path to that file. The file-path will look something like:
rtsp://smedia.depaul.edu/YourUsername/FolderYouPutTheFileIn(IfAny)/YourFile.rm
Remember to set the correct file permissions (see the QuickGuide with instructions on SSH).
2. To create a link to a video (audio) file from a web page, create a link to the .rm file you have placed on the streaming media server, just as you would to any other file (i.e. another web page). Make sure to use the rtsp and not the http prefix when typing in the file-path for the link (see Step 1 above). This is very important to ensure that audio/video files will be streamed rather than downloaded to the users' computers. There are three advantages to this:
 - i. waiting time is minimized,
 - ii. copyright infringement is avoided, and
 - iii. the server recognizes the connection speed of the users and automatically feeds the appropriate compressed file (for files that have been compressed at multiple rates).

After creating the web page with the links to the audio/video files, you can load this page to Blackboard as you would any other document.

Additional instructions if your users will browse through old versions of IE or Netscape:

Only the latest Netscape browsers (7.0 or higher) and IE 5.0 or later recognize the rtsp protocol. If you have an older browser, you need to create a text file using any simple-text application and save it with the same name as the video (audio) file but with a .ram extension. In the text file, type the path to the video (audio) file with the same name. For example:
rtsp://smedia.depaul.edu/YourUsername/FolderYouPutTheFileIn(IfAny)/YourFile.rm

Then, using SSH, transfer this text file with the .ram extension to the streaming media server, into the folder you placed the video (audio) file with the same name.

Next, create a link on a web page to the .ram file using the http protocol. The link will look exactly like the text in the .ram file but with http (instead of rtsp) in the beginning and .ram (instead of .rm) in the end. i.e.:

http://smedia.depaul.edu/YourUsername/FolderYouPutTheFileIn(IfAny)/YourFile.ram

After creating the web page with the links to the .ram files associated with your audio/video files, you can load it to Blackboard as you would any other document.

3. To create a link to your audio/video file directly from within Blackboard (without first creating a web page) you will need to type some code in the text window of the item linking to the desired .rm audio/video file, using the rtsp protocol. i.e.:

```
<a href="rtsp://smedia.depaul.edu/YourUsername/FolderYouPutTheFileIn(IfAny)/YourFile.rm">text you want readers to read</a>
```

Additional instructions if your users will access the site using browsers earlier than Netscape 7.0 or IE 5.0:

The code should use the http protocol and link to the desired .ram files. i.e.:

```
<a href="http://smedia.depaul.edu/YourUsername/FolderYouPutTheFileIn(IfAny)/YourFile.ram">text you want readers to read</a>
```

4. To embed a video (audio) on a web page (so that the audio/video screen and controls appear on the desired place on a page, as opposed to having a media player open separately), include the following code at the position on the page where you want the video (audio) to appear (the code below assumes that you and your site's visitors have Real Player installed).

```
<p><embed SRC="file-path to YourFile.rm" WIDTH="320" HEIGHT="240"  
CONTROLS="ImageWindow" CONSOLE="one" MAINTAINASPECT="true" >  
<br>  
<embed SRC="file-path to YourFile.ram" WIDTH="320" HEIGHT="20"  
CONTROLS="ControlPanel" CONSOLE="one" AUTOSTART="false"></p>
```

The first *embed* command embeds the video screen. The second *embed* command embeds the controls (i.e. play, stop, etc.). Only the second *embed* command is needed to embed an audio file. The *width* and *height* parameters are in pixels and can be set as you choose. You mainly need to keep the width in both embed commands the same. The SRC parameter will contain the path to the .rm file you have created. i.e.:

```
SRC="rtsp://smedia.depaul.edu/YourUsername/FolderYouPutTheFileIn(IfAny)/YourFile.rm"
```

Special instructions if your users will browse through Netscape 7.0 or earlier:

Embedding is not recommended in Netscape.

Questions? E-mail blackboard@depaul.edu or call 773-325-1091!