

## Streamcorder Application Note 6

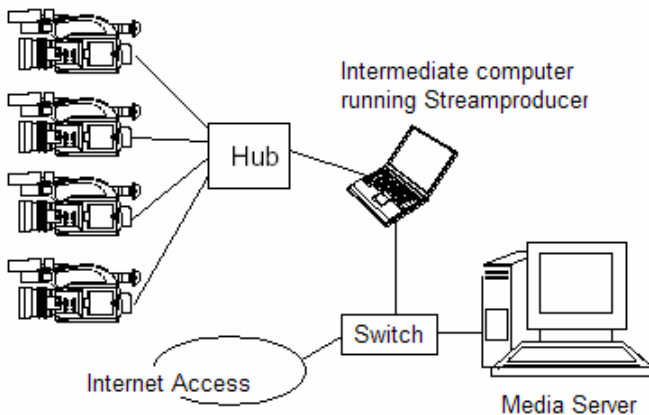
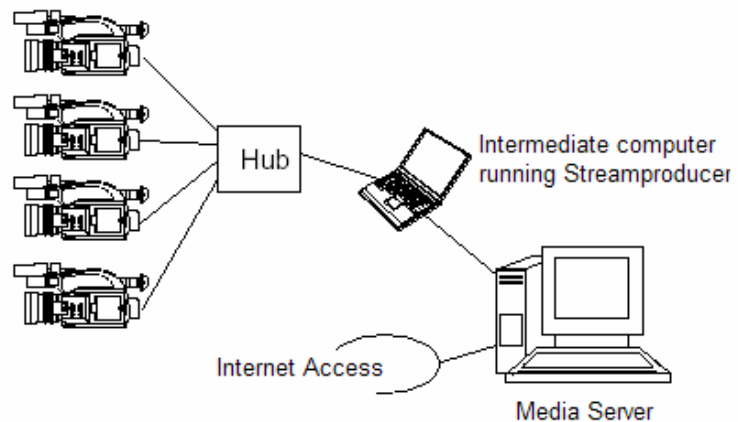
Subject: **Using Streamproducer with a Microsoft® Media Server**

Although it is possible to stream video directly to the internet from a Streamcorder or a locally attached computer, if you need to provide connectivity to more than a few users, you must use a Media Server. There are several configurations for streaming from a Streamcorder through a server, some of which are shown here:

The first scenario uses an intermediate computer running Streamproducer to consolidate the video from multiple cameras. A separate Media Server is used to stream the single output of Streamproducer to the Internet.

We have shown a Hub in this figure; however, if connecting to a single camera, this is not necessary.

This is the simplest way to stream to many users, however, this method requires an intermediate PC and multiple network interfaces in both the PC and server. In some instances where physical access to the Media Server is limited or permission to install software on the Media Server is denied, this may be a valid scenario.



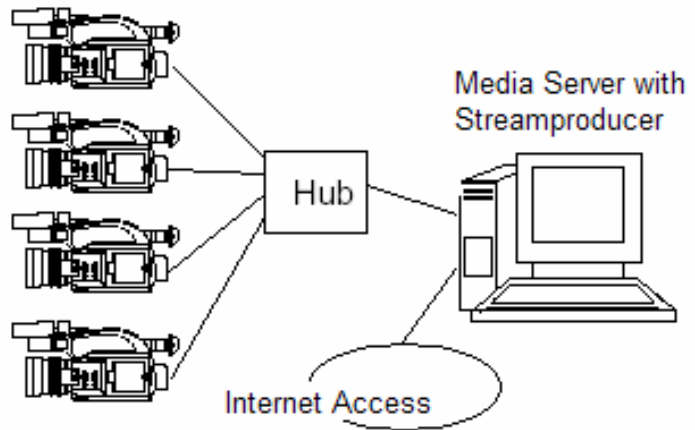
may be a valid scenario.

### Single Computer Implementation

Described below, is a method for configuring a Media Server with Streamproducer to eliminate the need for an intermediate computer. This can be done either with a second network interface in the server, as discussed here, or connecting through a switch.

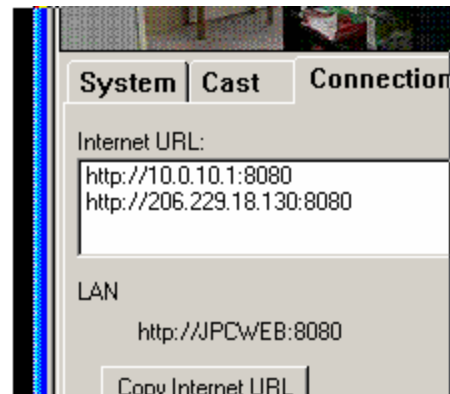
The advantages of this method are obvious...less hardware means lower cost, and fewer things to go wrong!

1. Install Streamproducer on your media server. The installation process is the same as that of any Windows based operating system. Refer to your User's Guide for details. Please note that you will need to reboot the server after Streamproducer installation
2. If possible, the cameras and servers' network interface cards should be configured with static IP addresses since dynamic addresses are not guaranteed to always be the same.
3. Open Streamproducer and connect to the camera as shown in Application Note 5, "Installing Streamproducer".



To determine a valid IP address, to use as a publishing point for the server, open Streamproducer and click on the 'Connections' tab in the lower right corner. Select any address you see in the window that is not in the same network group as any cameras. For example, as shown here, there are two addresses shown: 100.10.1:8080 (this is in the same network group as our camera), or 206.229.18.130:8080 (this is the servers IP address, and is the one we will use).

4. On the server, click 'Start', then 'Programs', then 'Tools', and then 'Windows Media'. The following illustrations are for Windows 2000 Server.
5. From the Windows Media Administrator, select 'Unicast Publishing Points' as shown below.



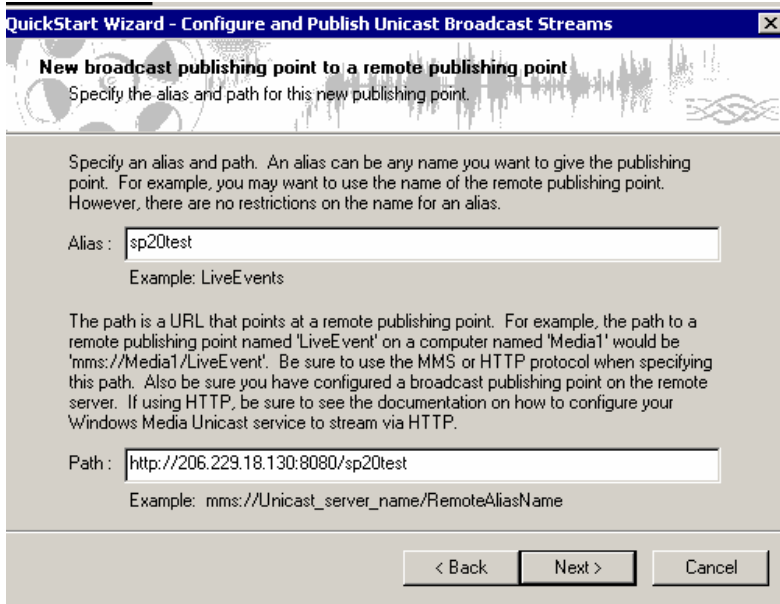
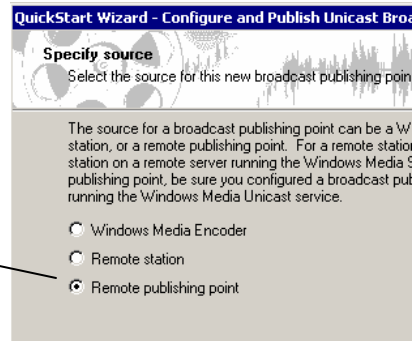
The screenshot shows the 'Windows Media Administrator' interface. The title bar reads 'Windows Media Administrator - Microsoft Internet Explorer'. The main window title is 'Configure Server - Unicast Publishing Points'. The left sidebar shows a tree view with 'Unicast Publishing Points' selected. The main content area contains two sections: 'On-Demand Unicast Publishing Points' and 'Broadcast Unicast Publishing Points'. Each section has a table of publishing points.

Alias	Path	Maximum clients	Maximum bandwidth
<Home>	D:\ASFRoot	No Limit	No Limit
asfrootnone	D:\ASFRoot\none	No Limit	No Limit

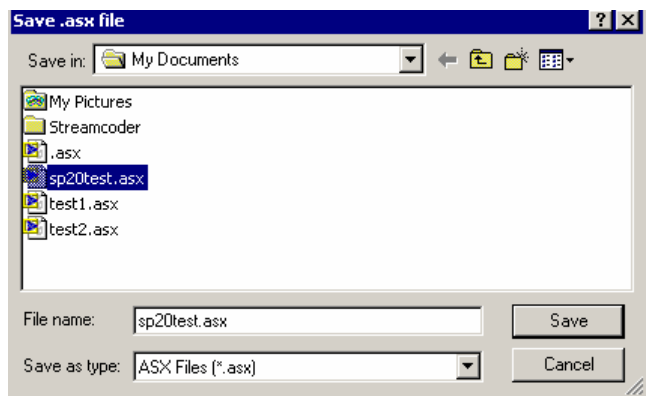
Alias	Path	Maximum clients	Maximum bandwidth
test1	http://192.168.100.102:2170/test1	No Limit	No Limit

- In the 'Broadcast Unicast Publishing Points' dialog box, select 'Use wizard...' as shown above.
- Click on the 'Broadcast' bar and select 'New'. The wizard will make it easy to configure the server for this application.
- When asked, select 'Create a broadcasting publishing point' and click 'Next'.
- Select 'Remote Publishing Point' and click 'Next'.



- Assign an alias to the publishing point. In this example, an alias of 'test1' has been used.
- Enter a full path pointing to the remote publishing point as shown here. The full path includes the port number shown after the IP address in Step 3 above. The full path includes 'http://'. The IP address, the port number and the alias. In this example, the full path is <http://206.229.18.130:8080/sp20test>
- Click 'Next' to open the "Select publishing method" window. Accept all defaults and click 'Next'.
- On the next page, click 'Finish'. In the 'Save .asx file' window that opens, save the asx file in a location of your choice. Here I have saved this file in the 'My Documents' folder.

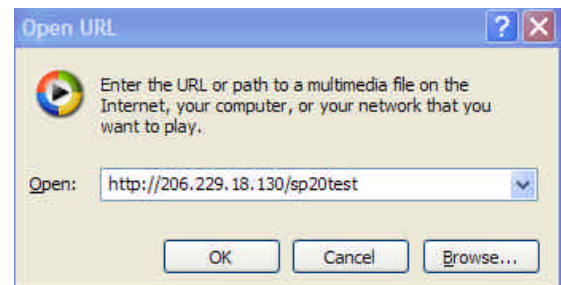
- In the last window that opens, you will be offered buttons for testing the URL and the .asx. You should test both.
- With Streamproducer running, connected to the camera and casting, click on either of these buttons. Windows Media Player opens, and you should see the streamed video. If you do, click 'Close'. Your server is now configured for streaming.



### Viewing the video stream from the Internet

If the server is connected to the Internet with a global IP address (an address reachable from outside the LAN) anyone, from anywhere in the world with broadband Internet access can view the video using Windows Media Player 7.1 or later (WMP). WMP is now available for all platforms, including MAC, Linux and UNIX.

- Open Windows Media Player.
- Click on 'File' then 'Open URL'.
- In the window that opens, enter the address of the server and the alias, as shown here. Click 'OK'.



4. Windows Media Player will need to download the required codecs from the Microsoft Web Site. If asked if you want to do this, you must click 'Yes'.
5. After the codecs are downloaded and installed, you will see the video. There is about a 30 second delay due to the buffering involved at both ends.



This completes the configuration of a typical Media Server with Streamproducer. This is just one example, and the cameras that Streamproducer connects to can be local or anywhere in the world. JVC is sorry, but beyond this application note, we cannot support your server configuration. There are just too many possible server variations and configurations for us to be able to support. If you have a problem, you can call me (thats me in the picture above) at 973.317.5128 from 8:30 AM to 5:00 PM Eastern time.

JVC wants you to get the most from your Streamcorder. If you have any question or concerns, please feel free to contact us.