

# Onsite Encoding

This document describes the onsite encoding aspects of a **customer-controlled event**. Knowledge of personal computers, audio-video technology and other logistics is assumed in this document. Lighting and other production logistics are documented elsewhere in Netbriefings procedure guidelines.

## Site Requirements

- High-end personal computer workstation for encoding the signal
  - Video capture device such as the Osprey 230 or 240 by Viewcast
  - Audio capture device: The Osprey 230 and 240 include audio capture capabilities
  - Encoding software installed: Windows Media Encoder™.
- Personal computer workstation for production/presenter messages connected to the network, if present. (*Internet requirements follow.*)
- Access to Internet with sufficient guaranteed bandwidth to support the encoded signal and additional production overhead. This is calculated by adding:
  - the variable bit rates of the encoding computers
  - additional 50% for overhead
- 100K for production features such as slide pushing, polling, presenter messages
- Firewall requirements – For Presenter/Encoding stations
  - Static IP address for Windows Media Encoder™
  - Port 8080 from the server to the encoding machine for Windows Media Encoder™

## Installing and Testing the Stand-Alone Encoding

Prior to using the Netbriefings encoder web interface you should configure the Microsoft Windows Media Encoder™, with your camera and audio feed. We recommend you broadcast a live test event using the stand-alone encoder setup. When successful, you may then test with the Netbriefings encoder web interface.

## Installing your Video Capture Device

- Install your video capture device according to the manufacture's documentation and connect to your camera.
  - With the Osprey products you should ensure that the video capture device is working with the camera by using the "Swiftcap" utility, if available

## Installing your Microphone

- Install and connect your microphone to your encoder computer system, typically one of the Osprey 2xx line of video/audio capture cards. Take careful note of the device number.
- You should ensure your audio capture device works with standard windows utilities such as the "Sound Recorder" before continuing.
- For enhanced flexibility, you may choose to use an audio mixer which allows you to sample the mixer output, as well as multiple inputs. Also note that you can sample the audio that is being sent to the Osprey card by plugging a headset into the 'mini-' jack on the card itself.

## Encoding with Windows Media

- Download and save the Microsoft Encoding software from this link:  
<ftp://netbriefings.com/pub/WMEncoder.exe>
- Install and configure the encoding software.
- You should test that you are able to properly encode a video/audio signal from your camera and audio source to a file and view the file with the Windows Media Player. You are now ready to attempt a live stream.
- Provide Netbriefings with your encoder's static IP address and the port you will be using to send the encoded signal. (Netbriefings recommends port 8080.)
- Netbriefings will provide you with an *mms* URL for you to enter into your player when testing the output of the live broadcast.
- Test the live broadcast. Be sure to observe the quality of the broadcast which is influenced by both the lighting and the audio levels.

## Encoding with the Netbriefings Encoder Web Interface

For each event Proclaim Enterprise software will generate an encoder front-end web page that is to be used by the encoding station. This allows communication between the encoding station

and the Proclaim Enterprise software to synchronize polling, slides, surveys and other broadcast features.

- The encoder page is automatically generated when the event is published. The encoder listing can be accessed from your Proclaim Enterprise portal Home page by first selecting the event, then selecting *Encoder List* from the *Live Action* section.
- Within the encoder html file are values that need to be entered or changed based upon the event and customer:
  - For encoding in the Windows Media format:
    - Make sure your Internet Explorer security settings are set properly according to the appendix at the end of this document.
    - Select the Windows Media option from the Encoding List in Proclaim Enterprise software.
    - When using static IP addresses, a 'publishing point' must be set up on the Windows Media server to identify the location of the encoding computer.
    - You need to select the correct encoding profile provided by Netbriefings.
    - It is CRITICAL that the audio levels and video quality be checked out for all audio and video sources prior to the live event. (At Netbriefings, the presentation is monitored at all times from a viewer station with a known acceptable audio level.)
  - The Record To File, Output File Name, and Output File Directory values are used to capture the encoding session for archival processes. These fields on the encoding web interface contain values on open. Do not alter these values unless directed by Netbriefings.
  - Once the above information is entered you may click on Start Encoding to begin the encoding session. You should test the encoding session by viewing the event using the agenda page just like any viewer would. Please do this on the production machine, not the encoding stations. The encoding stations should be dedicated to encoding.

## Encoding a Live Event

- When encoding a live event, the encoding process is the most critical process of the webcast. It is recommended that only the encoding process be run on the encoding PCs.

- Typically, you start encoding a live event 10-15 minutes in advance. Normally during this time the presenters should rotate between a series of slides. If no customer specific slides are available you may use the “Standby Slides” about every 30 seconds. You should see the proper URL, from the slide push, appear on the encoding web page.
- When an event is finished it is best to leave the encoder running for 2-5 minutes after the event. This ensures a smooth transition. For events with surveys at the end, it is recommended to leave the encoding process run for at least 5 minutes.

## Troubleshooting Event Encoding

- There is one major aspect to trouble shooting. Recall that the encoder pages provided by Netbriefings are simply an extension to stock encoding software. You should make sure that the stock encoding software operates and encodes without using the HTML front end provided by Netbriefings.
- If you are able to encode using the stock encoding software and have problems with the encoding, please contact Netbriefings technical support. We encourage you to test your encoding with the stand alone Windows Media Encoder™ prior to using the Netbriefings web based HTML front end.
- Several different audio and video settings may be employed depending upon the customer’s requirements and bandwidth of the end viewers. This document is simply a guideline. Proper testing and consulting should be done to satisfy the customer’s preferred requirements.
- Netbriefings cannot be responsible for connectivity from the encoding computer to the streaming server. Proper steps must be taken to ensure Internet connectivity, bandwidth and reliability based upon event criticality and the stability of the connection.

## Internet Explorer Security Settings for Encoding Using the Windows Media Encoder

This section covers the required security settings for Internet Explorer 8 on Windows XP in order to use the Netbriefings Windows Media Encoder page. You need to ensure that Internet Explorer Security is set to a Custom setting with the following configuration:

- Click on the *Custom...* button and specify the following:
  - Download UnSigned ActiveX Controls: *Prompt*
  - Initialize and Script ActiveX Controls Not Marked As Safe: *Prompt*
- Specify a *Medium* security setting

