Troubleshooting Using iDRAC7 Video Capture Features

This Dell white paper provides instructions on using the video capture feature from iDRAC7 to aid in troubleshooting.

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Executive summary

This paper provides information about the iDRAC7 video capture feature on Dell PowerEdge 12th Generation servers. This capability provides a valuable troubleshooting tool for administrators who are not physically present at the system. This is an enterprise feature, and is in *addition* to the last crash screen capture offered previously. Video capture provides a better understanding of an issue as opposed to only a screen capture.

Introduction

Using iDRAC7 for remote troubleshooting lets users diagnose potential issues. The video capture feature assists with remote debug by displaying the last screen while booting into the operating system.

This document covers:

- Minimum system requirements
- Installing Video Capture Player
- Using boot captures

Playing back the screen of the final seconds prior to an error occurring on a system is crucial information in troubleshooting the root cause of boot failures.

Setup and minimum system requirements

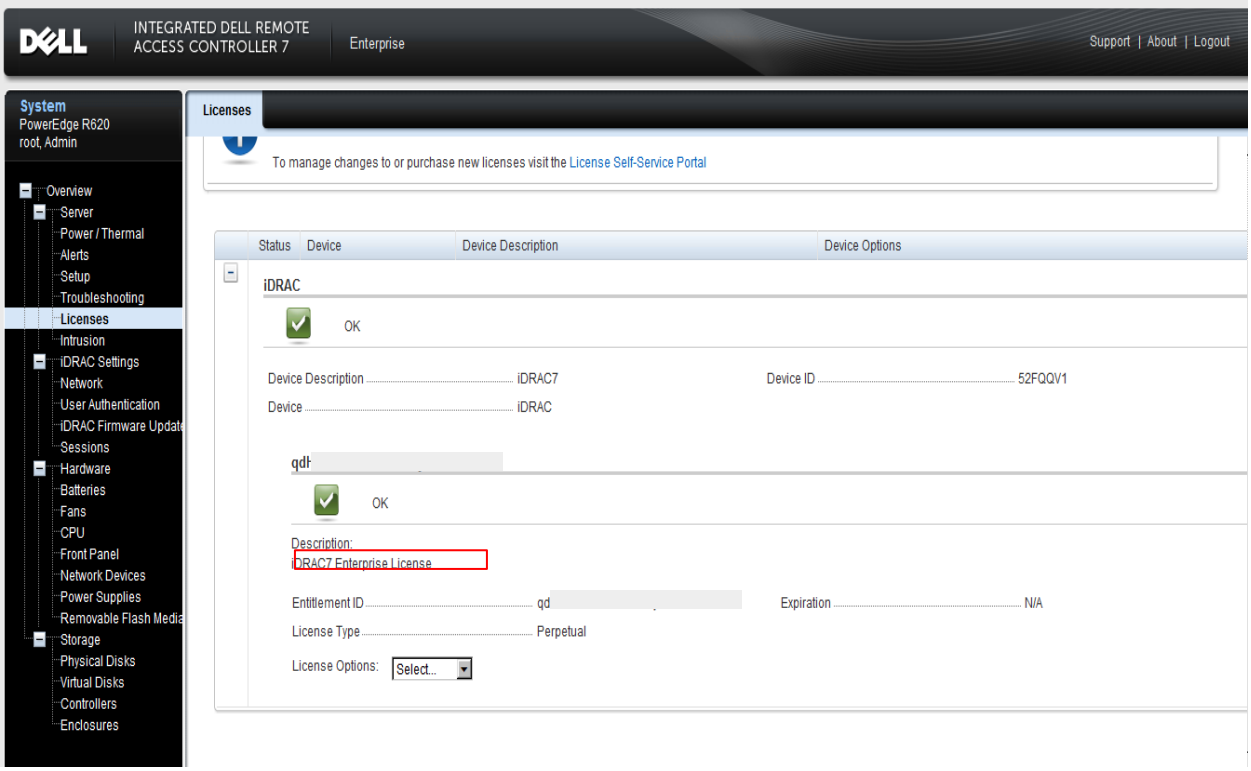
- Dell iDRAC7 Enterprise License
- 12G Dell PowerEdge Server Lines
  - 200-500 Series
  - 600-900 Series
- iDRAC7 Video Capture Player (if viewing boot capture files offline)
  - Java 5 Update 7 or later installed on the host system
- Java 6 or later installed (if viewing directly within iDRAC7 Virtual Console)

Navigating the iDRAC7 to confirm an Enterprise License is installed

A minimum requirement is the installation of an Enterprise License on the iDRAC7 to use the Video Capture Troubleshooting Feature. The easiest way to verify that the Enterprise license is installed is to look at the title bar (See Figure 1). If it specifies, Enterprise, it is installed.

Browse to the iDRAC7 GUI and verify Enterprise License is installed as seen in Figure 1:

Figure 1. Verifying iDRAC7 Enterprise license.



Managing and using boot captures

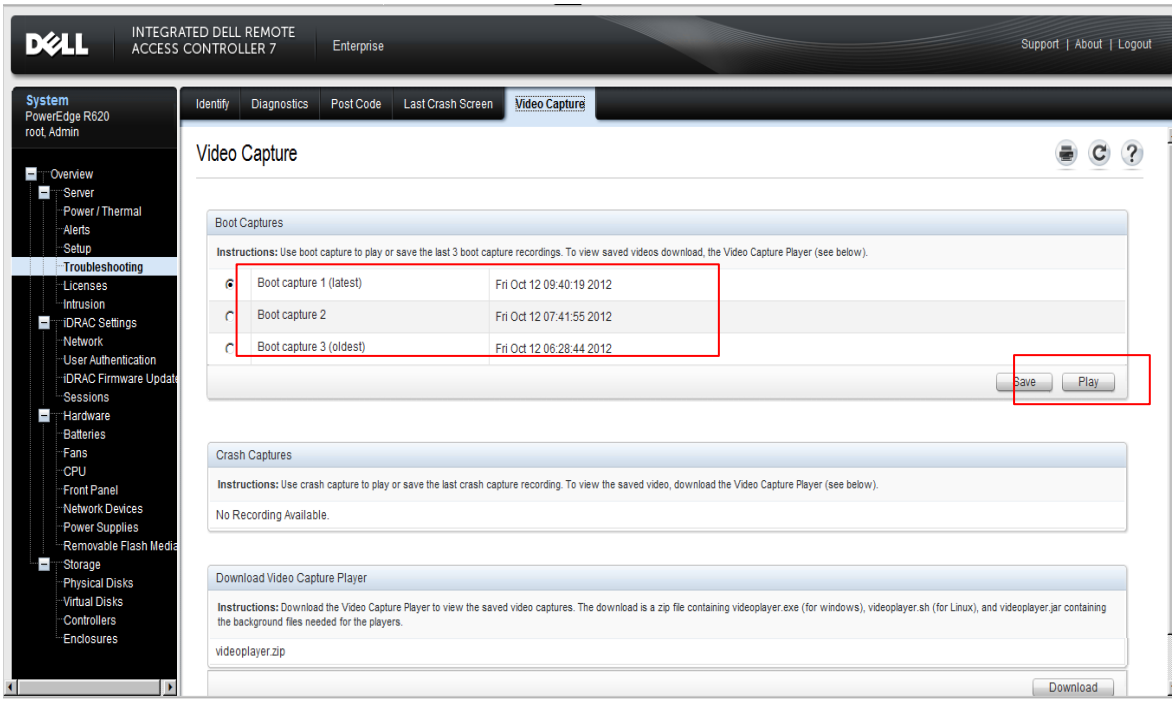
From the same menu where you obtained the Video Capture Player, the Boot Captures are organized for ease of access and playback.

View the video recordings of the last three boot cycles either directly from the iDRAC7 Virtual Console or offline using the video capture player. A boot cycle video logs the sequence of events for a boot cycle. When the host system is rebooted, the boot cycle video file captures up to 2 MB of booting details. The boot cycle videos are arranged in the order of latest to oldest as seen in Figure 2.

You have the ability to save any of the last three boot cycle videos for offline viewing.

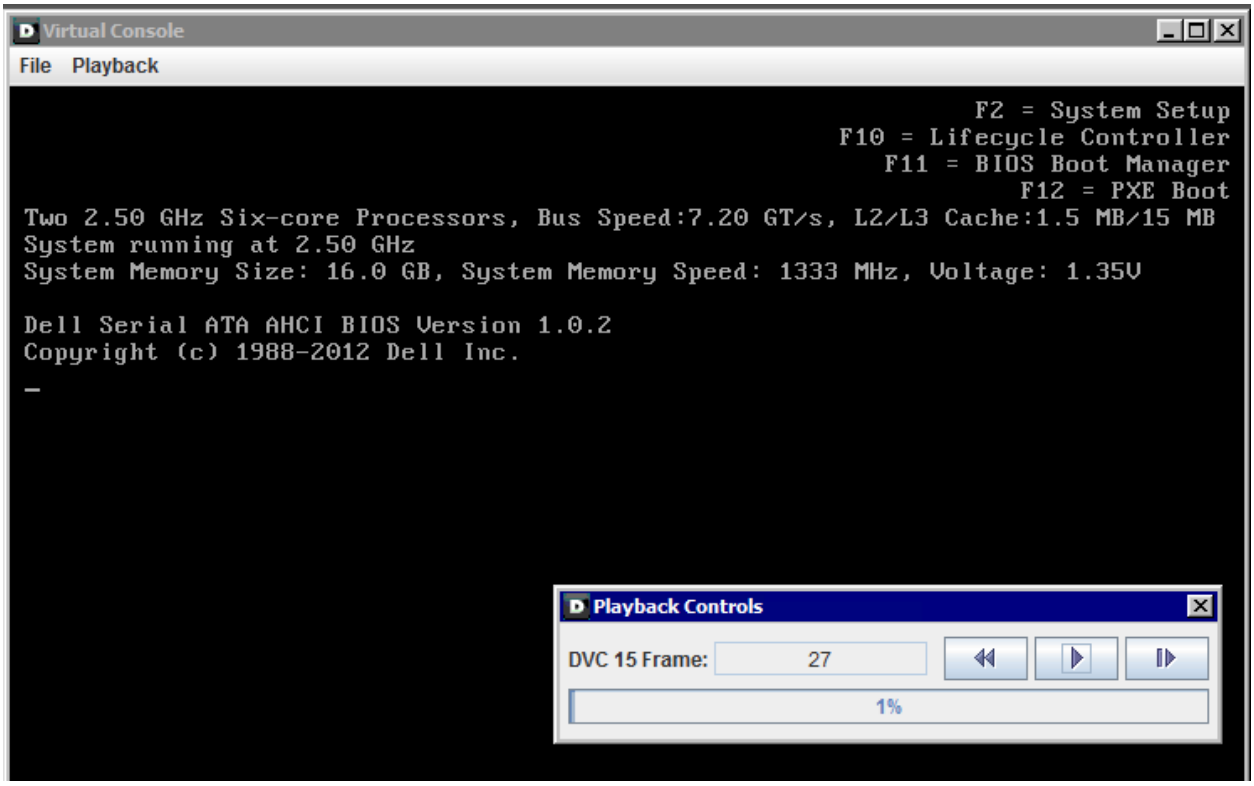
Note: If iDRAC7 is reset, the boot capture video is not available as it is stored in RAM and is deleted.

Figure 2. Managing boot captures.



Playback of the boot screens occur at a rate of 1 frame per second.

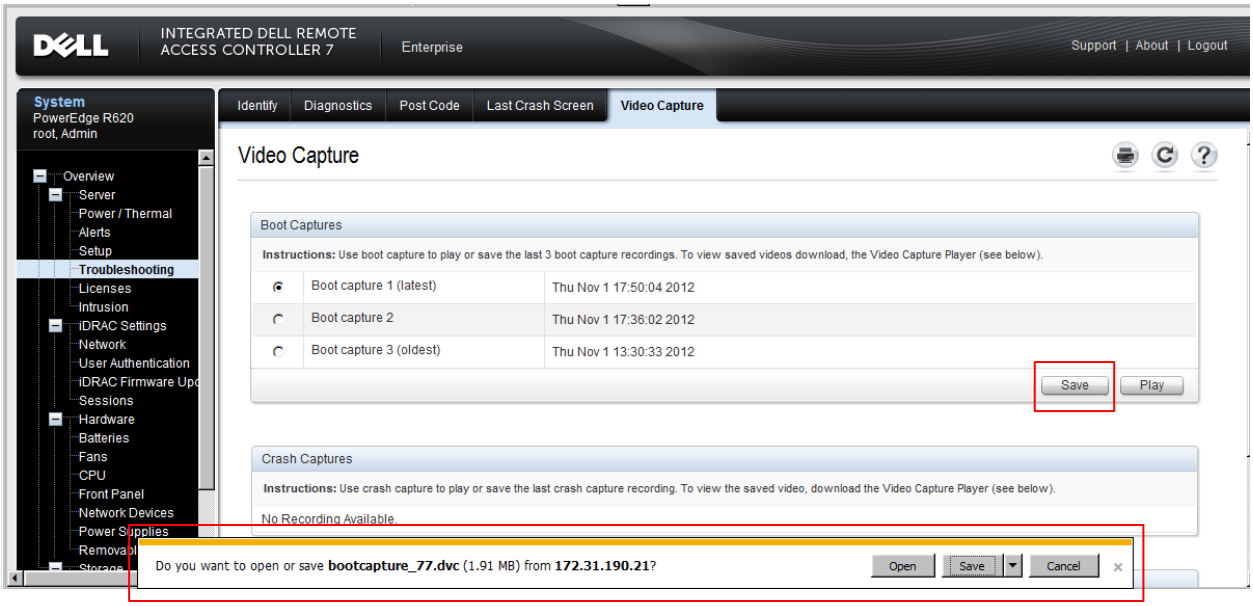
Figure 3. Video capture playback.



Installing the Video Capture Player for offline viewing

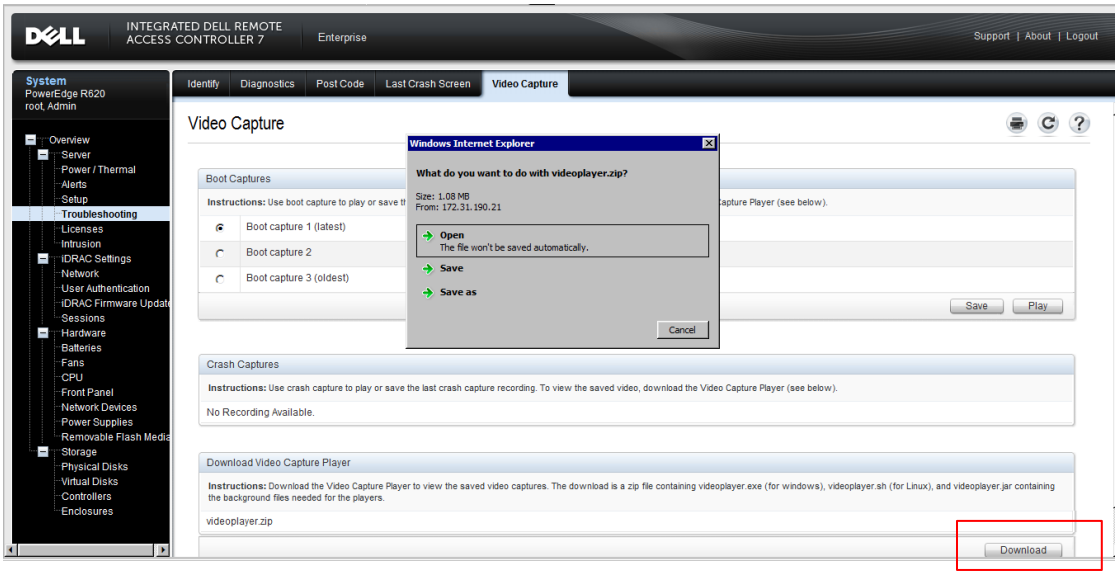
A prerequisite for viewing any boot capture video in an offline mode is the installation of a local video capture player. You can save a local copy of a boot capture for future use. The *Save* option prompts you to indicate the location to which to save the boot capture file (*.dvc file extension).

Figure 4. Saving a local copy of a boot capture file



To obtain the Video Capture Player, navigate to the troubleshooting section of the iDRAC7 GUI and click on the Video Capture Tab as seen in Figure 5. You can download the Video Capture Player from within the iDRAC7 GUI. The Video Capture Player download button provides a .zip file of the player for use on your management station.

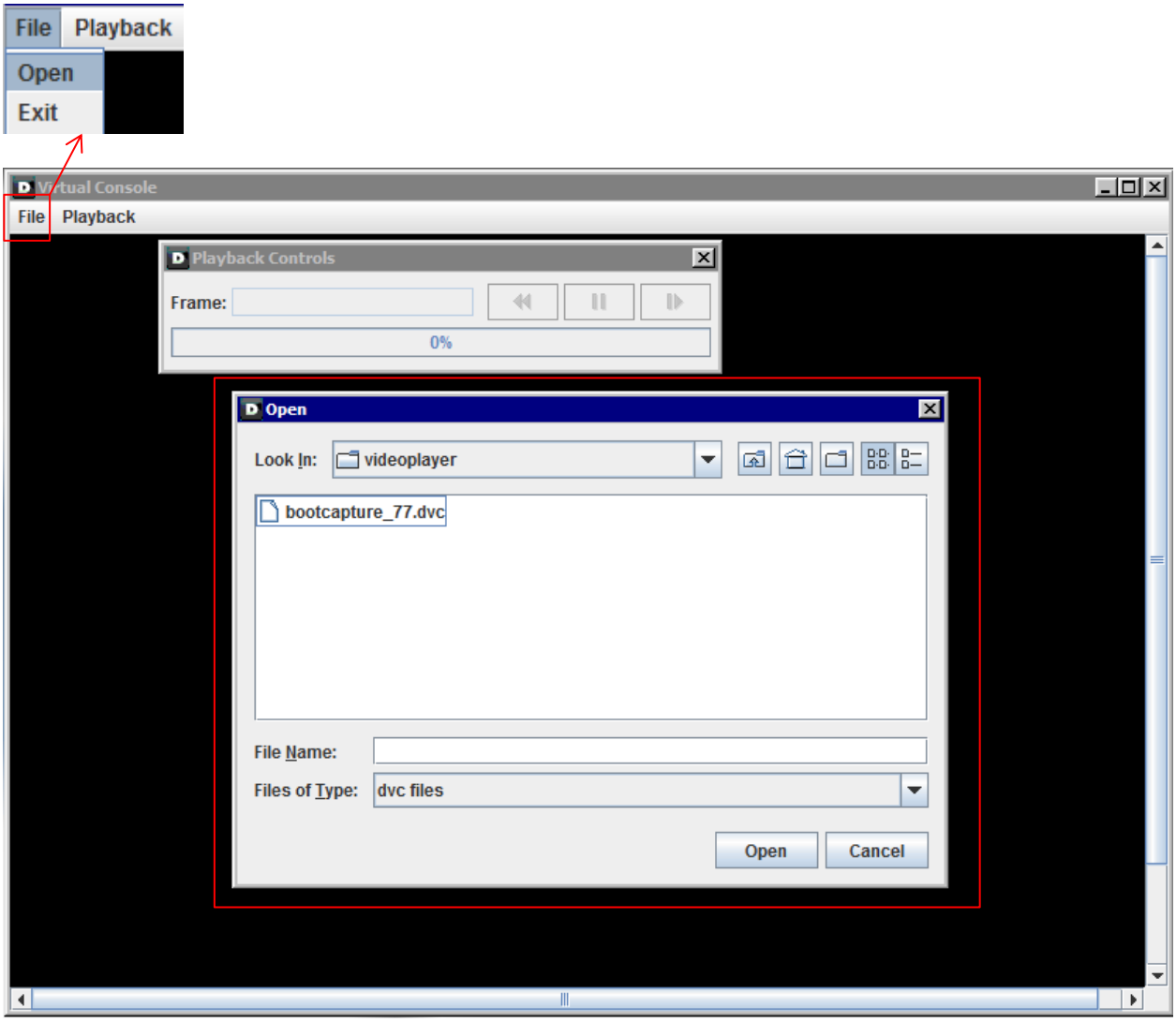
Figure 5. Obtaining the Video Capture Player from the iDRAC7.



The .zip contains a player for Windows and Linux: videoplayer.exe (for Windows), videoplayer.sh (for Linux). Launch the respective player for your operating system.

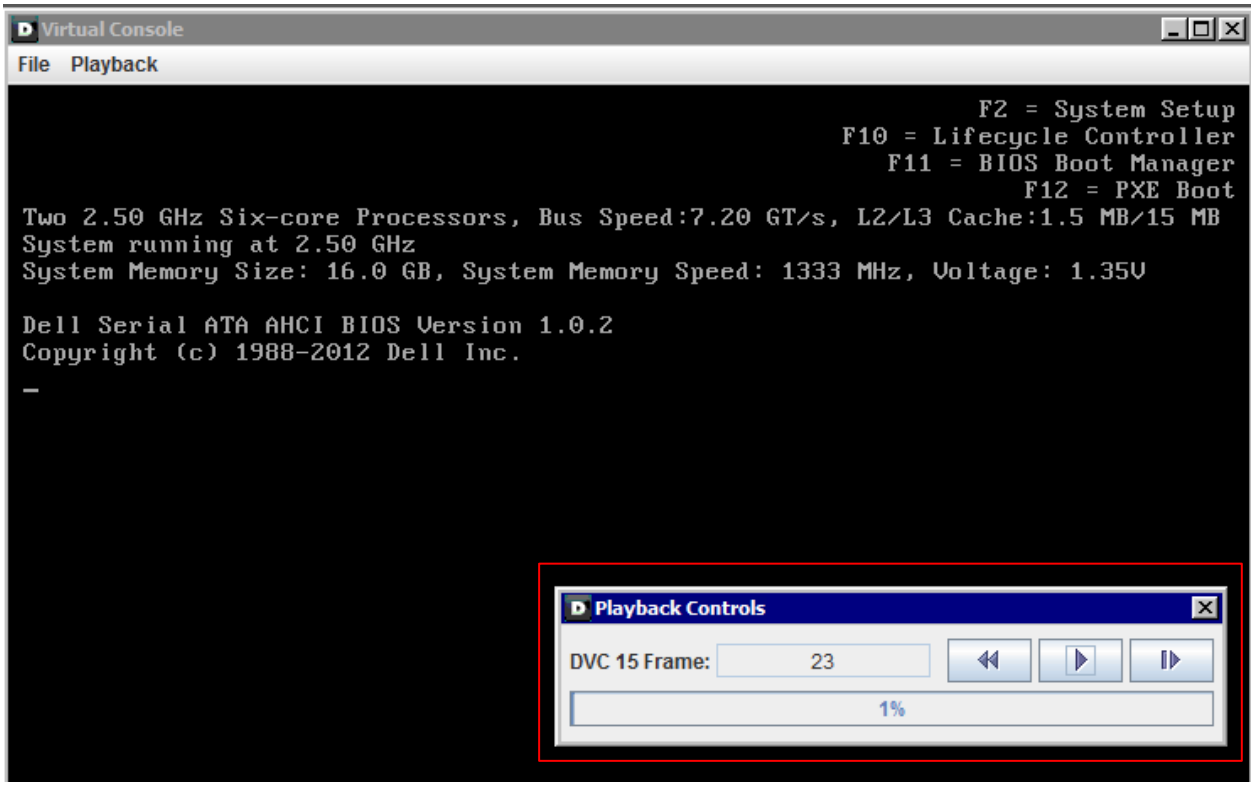
In Figure 6, the Windows player (videoplayer.exe) is launched. Choose *Open* from the *File* menu. In the Navigation window, browse to the location of the boot capture file (*.dvc file) saved in the earlier step.

Figure 6. Launching the Video Capture Player to view the boot capture offline.



The Video Capture Player, as seen in Figure 7, has the necessary playback controls for the video analysis of a system boot up.

Figure 7. Video Capture Player controls from the iDRAC7.



Summary

The Dell iDRAC7 provides remote troubleshooting capabilities that enhance the management of PowerEdge Servers. This document provides information on minimum requirements in using the Dell iDRAC7 remote video capture troubleshooting capabilities. Dell continues to listen to customer needs and to respond to customer requests by providing expanded tools to help pinpoint and remediate issues quickly with tools like iDRAC7 Video Capture.