

# Make Your Own Training Videos



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## Quick bio ...

- Mechanical engineer turned computer geek
- Private consultant since 1991
- Focusing on CAD standardization, customization and management
- Cadalyst Magazine contributing editor
- 14 year AU speaker

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# First Things First

Technology delivers the message but  
the message is entirely up to you!



## Videos are great for ...

- Delivering “show me” software instruction
- Facilitating self paced training
- Allowing users to repeat training
- Eliminating repeated training sessions
  
- **HOWEVER:**
- You need to create compelling content
- Good content means good training – video or not ...

# Pre-planning

## Picking the right first project



# Your first video project

- Short and simple
- Something you feel confident instructing
- Something your users need
- Something suited to “show and tell” learning
- Your first recording should be a success ...



# Suggestions

- Standards usage tutorials
- Project startup orientations
- Plotting/printing tutorials
- In short – something people would want to watch ...



# Computer

## General guidelines



# Hardware general rules

- A high performance CAD machine will usually do
- If your CAD runs well:
  - You'll be able to support video recording
  - Though you will notice a slight slow down
- If your CAD doesn't run well:
  - You'll still be able to record video
  - You'll notice a perceivable slow down
- Over spec your RAM if you can ...



## However ...

- I've run recording software on the following platforms:
  - 2 Gig RAM Vista laptops
  - 4 Gig RAM XP/Win7 laptops
  - Performance isn't great, but it works
- In cases of low end hardware you can:
  - Pre-load files
  - Reboot and disable all programs you can
  - Turn off wireless adapter (if you can)
  - Disable email client ...



# Operating Systems

Does it really matter?



# Sometimes no, but be aware

- For recording – not really
- Let your CAD programs dictate the OS
- Video recording will run in either 32/64 bit modes
- Vista/Win7 both work well
- XP works but is becoming crankier for these reasons:
  - Drivers for audio components are harder to find
  - Software CODECS for video players are harder to find
- However ...



# Sometimes yes

- For production and compiling – yes
- Vista/Win7 both work well
- 64 bit with lots of RAM really speeds operations
- XP is like dragging a boat anchor
- So:
  - You can record with older hardware/OS and 32 bit
  - Produce and render with 64 bit OS
  - Faster hardware = faster production and rendering ...

# Software



# Camtasia Studio by TechSmith

- Runs on 32/64 bit operating systems
- Requires no special graphics cards
- Simple when using basic features
- Powerful enough to do more if you want (editing, etc.)
- Cheap given what it does (\$299)
- Over spec your RAM if you can ...



# Audio Gear

Don't go cheap!



# Audio accessories

- **Minimum:**

  - Headset USB microphone (voice recording)**

  - Headphones (monitoring)**

- **Better:**

  - Good USB desktop microphone**

  - Windscreen/pop filter**

  - Good USB desktop speakers**

  - High performance ear buds**

- Nice to have:**

  - Wireless microphone for live recording ...**

## Recommended audio accessories

- Blue Yeti USB desktop microphone
- Skull Candy FMJ in ear buds
- Auralex isolation pads and MudGuard
- Sennheiser HD280 headphones
- Sennheiser SR450 wireless microphones
- CAD U2 USB headset mic
- Get these from a MUSIC store ...



# Setting Up Your Rig

A comfortable environment is key



# Your recording “studio” setup

- **On your desk:**

  - Mouse pads/Auralex for speakers (vibration dampening)**

  - Mouse pad/Auralex for microphone (vibration dampening)**

  - Windscreen/pop filter (between microphone and you)**

  - Headphones (monitoring)**

  - Copy clip or stand (to hold scripts)**

- **Environment:**

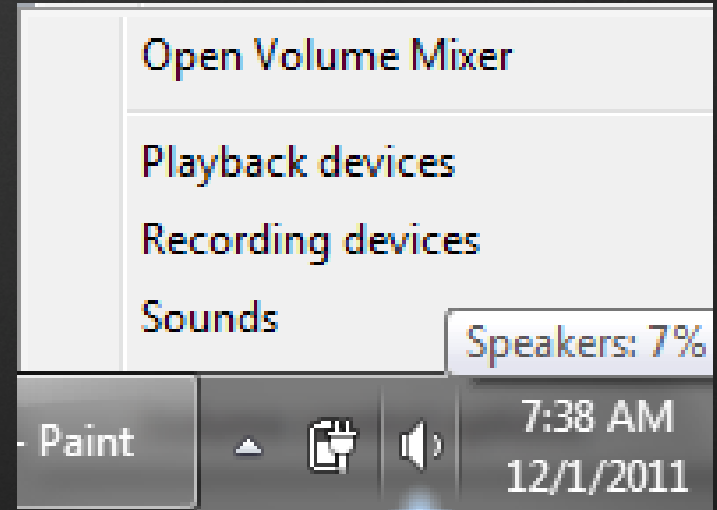
  - Relatively quiet**

  - Non-echoic (don't record in lunch room!)**

  - Comfortable, non-squeaky chair ...**

# Plug everything in and reboot (to test)

- **Make sure:**
  - USB microphones are “found”
  - USB speakers are “found”
- **Verify that:**
  - All devices are set to default
  - That audio “plays back”
- **Reboot and verify:**
  - No conflicts
  - Audio still plays
  - Microphone still records ...



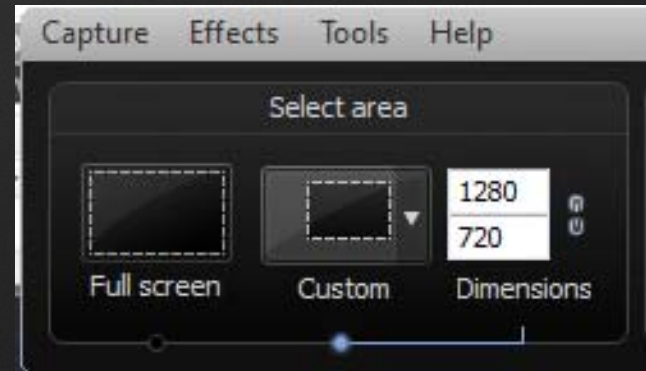
# Software Setup

Recording audio and video optimally



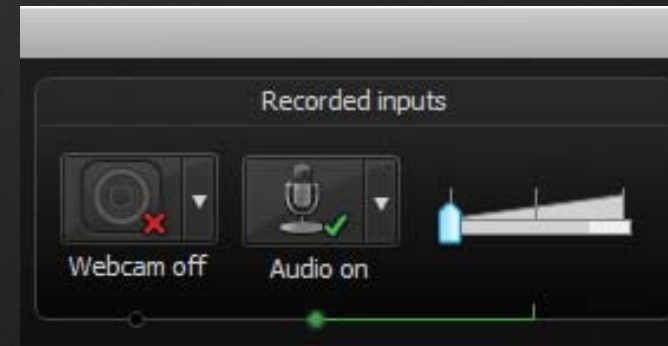
# Screen area

- **Set the right size:**
  - 1280x720 (720 HD)
  - 1024x768 (older screens)
- **Size your CAD application:**
  - To match the resolution above
- **The goal:**
  - To record in common resolutions
  - To match output requirements ...



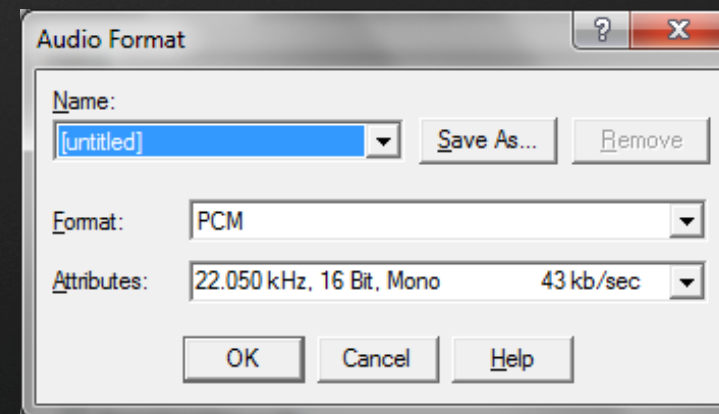
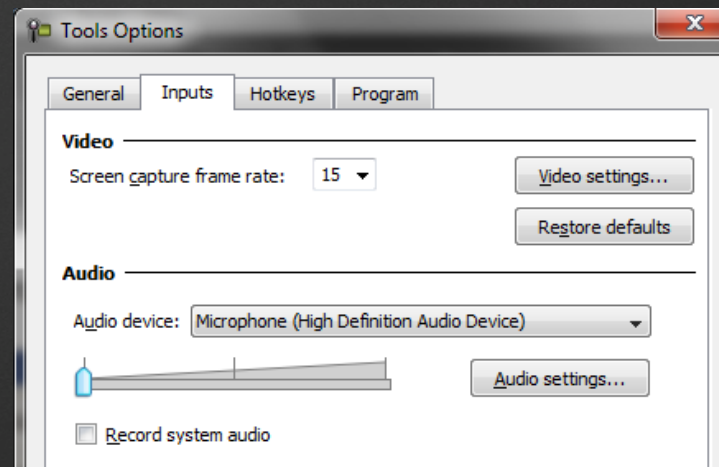
# Audio parameters

- Make sure audio is:  
**On!**  
That you see action on the meter ...



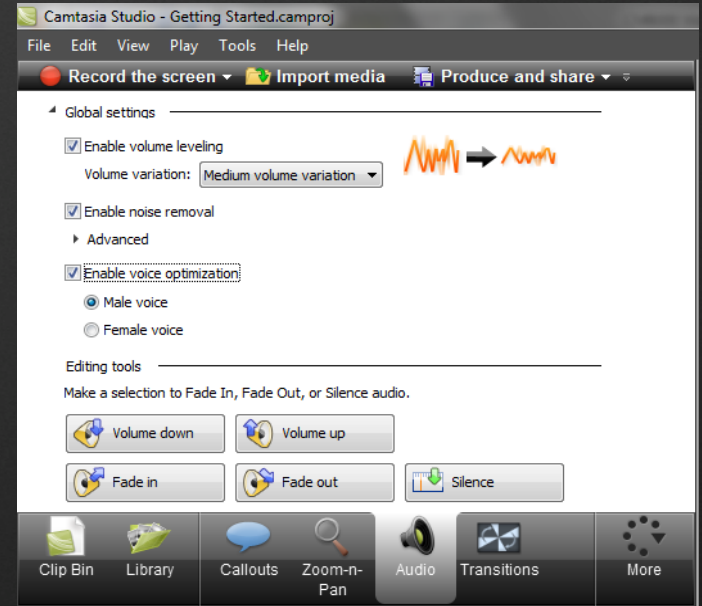
# Audio format

- For best results:
  - 22 kHz
  - 16 Bit
  - Mono
- Why:
  - Good sound
  - Compact size ...



# Rendering (later)

- Set things up right now
- Rendering will run faster later
- Because:
  - Resolution will be right
  - Sound files will be compact
- Fast is good ...



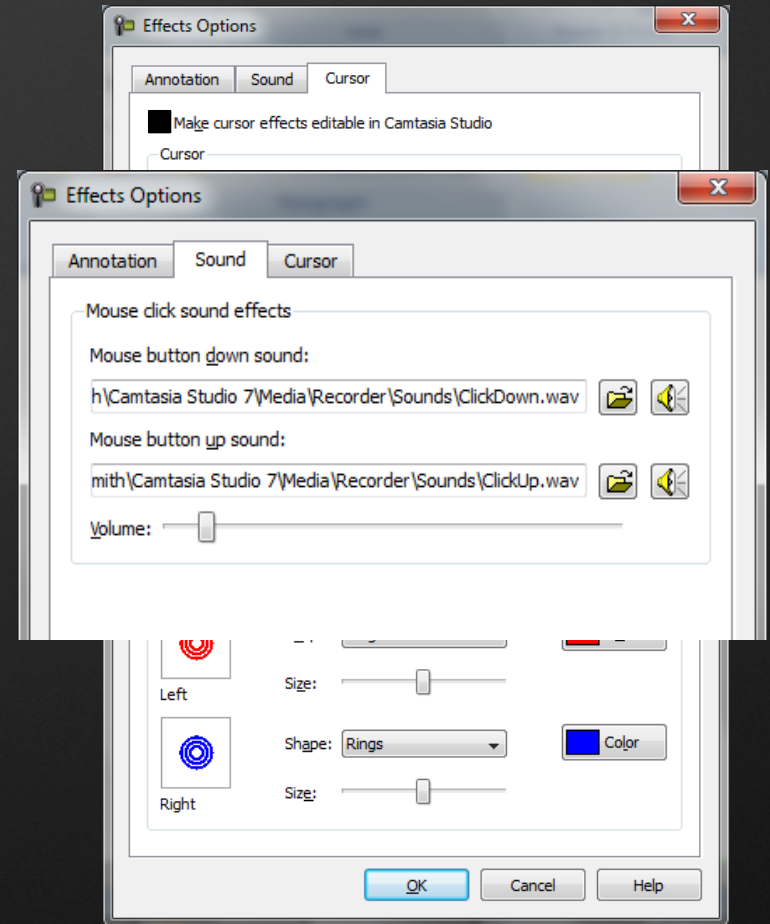
# Audio/Visual Adjuncts

Because when they watch the  
video they don't see you



# Clicks and picks

- **Visual:**
  - Uses flashing circles
  - Color coded click/right click
- **Audio:**
  - Sound for click
  - Sound for right click
- **Why:**
  - So you don't have to say it
  - Just explain at the start of the video
  - You can turn these off later ...



# Story Boarding

If they can't see it they can't learn it



# What is a story board?

- A very basic summation of your video
- Like this:
  - Explain new plotter name
  - Show standard page setups
  - Show standard styles
  - Run through example plot
- That's it – simply a block layout of the video ...



## Why do it?

- To collect your thoughts
- To help create a course handout later
- The more you know now, the easier recording will be ...



# Presentation Tips

If they can't see it they can't learn it



# A few things to remember

- Show the finished product first
- Give a brief overview first – state your approach
- Explain click/right click sounds/effects
- Move the mouse slowly so the user can see it
- Emulate a casual user training environment
- Speak clearly and calmly

Annunciate

Avoid “ums” and “aws” ...



# Video Rehearsal

Integrating recording into the process



# Talking it through

- Get your example files ready
- Now do a dry run through the training
- Just pretend you're tutoring a user
- As you do this, record!
- Note – I haven't written a course guide yet ...



# Listen to your first recording

- How does it sound?
- Did it flow well?
- Will it make sense to users?
- Would you change anything?
- Did you like your speech?
- Now you know what to improve ...



# Adjust and re-record

- **Modify example files**
- **Change sequence/flow if required**
- **Speed up/slow down as appropriate**
- **Record it again**
- **Review it again**
- **It should be pretty tight now ...**



# Building Course Guides

Handouts to go along with videos



# Yes, you still need to create handouts

- They will watch the video
- Then they will go back to the handout
- You need a script for the video anyway
- Especially for
  - Step by step procedures
  - Learning software features
- Guidelines
  - Screenshots are best
  - Keep text minimal ...



# The good news

- Your video rehearsals make handouts easy
- Simply:
  - Run through the examples again
  - Get pertinent screen captures
  - Paste into Word document
  - Add descriptive text between captures
- Don't remember what you did?
  - Watch your own video
  - Listen to your own voice ...



# Live Training

Integrating recording into the process



# Why not?

- If you're going to train live – record it
- It only adds a little effort to the process
- It captures you in natural training mode
- It gets you used to recording ...



# Final Recording

## Studio versus live



# In your studio

- **Here's your checklist:**
  - Print out handout/script**
  - Get your example files in order**
  - Reboot machine**
  - Disable email client or anything else that can “pop up”**
  - Do a quick warm up recording to get settled in**
- **Now run through your exercise at full speed**
  - Don't stop**
  - Don't worry about minor errors**
  - Try not to think about being recorded ...**



# Recording live training

- Here's your checklist:
  - Use a headset or wireless lavalier microphone
  - Print out handout/script
  - Get your example files in order
  - Reboot machine – connect to projector
  - Disable email client or anything else that can “pop up”
  - Do a test recording to verify machine setup
- Now conduct your training
  - Hold questions until later
  - Try not to think about being recorded ...



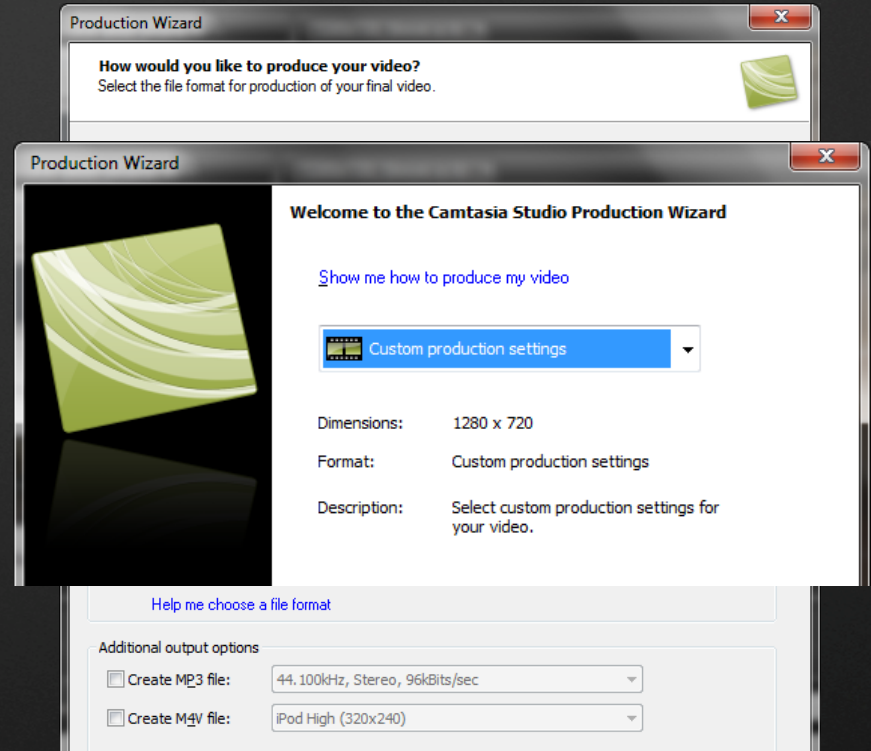
# Production

If they can't see it they can't learn it










# Set graphical parameters

- Pick your format:
  - Windows Media
  - Flash
  - Other
- Pick your size:
  - 1280x720
  - 1024x768
  - Other ...



# Alternate formats?

- iPod, iPhone:  
M4V
- Audio:  
MP3
- Can be created at the same time as other outputs ...

-  MOV - QuickTime movie
-  AVI - Audio Video Interleave video file
-  M4V - iPod, iPhone, iTunes compatible video
-  MP3 - audio only
-  RM - RealMedia streaming video
-  CAMV - Camtasia for RealPlayer streaming video
-  GIF - animation file

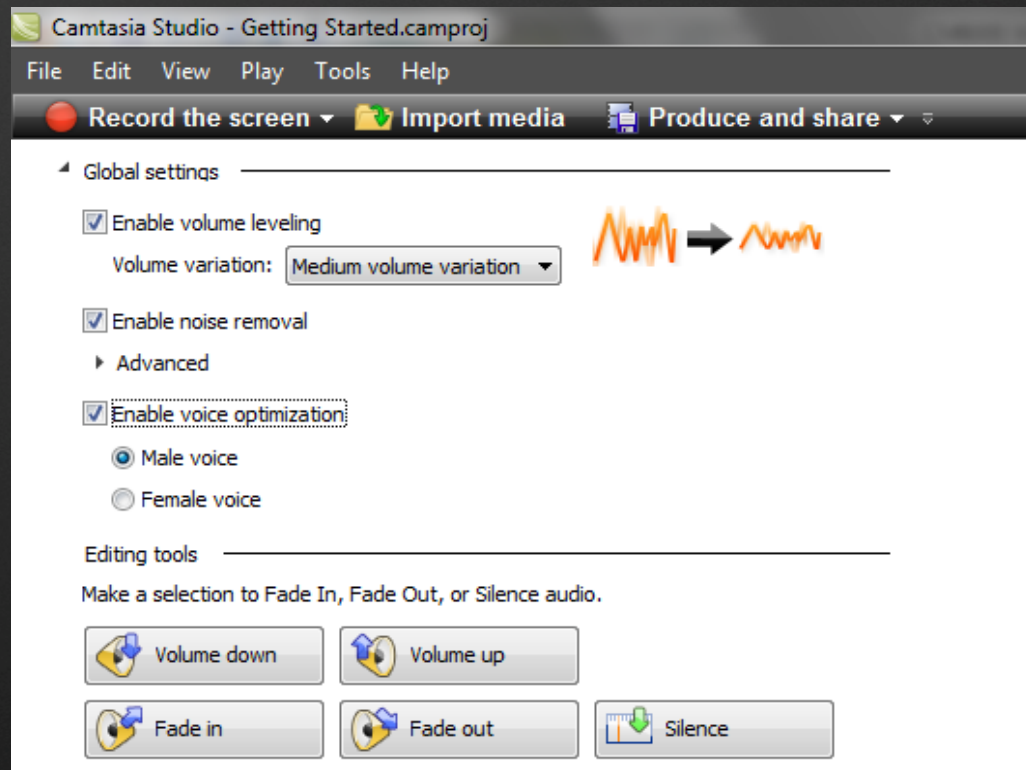
[Help me choose a file format](#)

## Additional output options

- Create MP3 file: 44,100kHz, Stereo, 96kBits/sec
- Create M4V file: iPod High (320x240)

# Tweak the audio

- **Volume leveling:**
  - Low for studio
  - Medium for live
- **Use noise removal**
- **Voice optimization:**
  - Female – bass boost
  - Male – mid boost
- **Be sure to save ...**



# Recycling

Reuse what you record



# Use videos again and again

- **Make them available:**

**On your LAN/WAN**

**As downloadable Podcasts**

**Combine with handouts:**

**Store handouts in PDF**

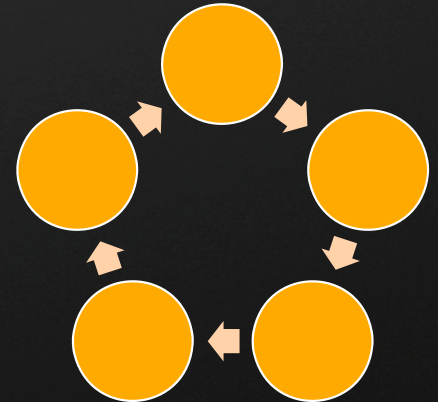
**Embed hyperlink in PDF to launch videos**

**Make it simple:**

**To learn independently**

**For users to watch rather than ask again!**

**You'll be glad you did ...**



# Keep at It!

It becomes natural after a while



# Resources

- **CAMTASIA:**

  - On your LAN/WAN

  - As downloadable Podcasts

**Combine with handouts:**

  - Store handouts in PDF

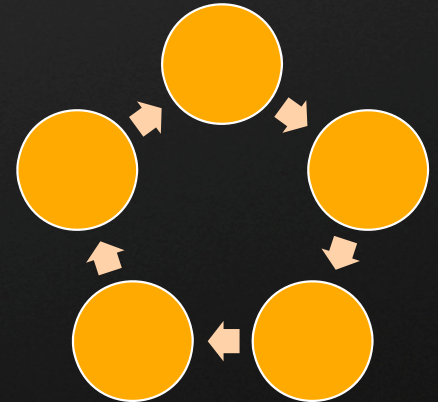
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