

MILO Course Designer

Software Version 4.3

User Manual Version 1.1



Introduction

MILO Course Designer is an intuitive, graphical interface program for editing and producing interactive based training content. The content can be comprised of many different videos, graphics, texts, slides and questions that you create, as well existing documents. The content you create can be used for presentations, classroom instruction and testing and for use-of-force and firearms training. MILO Course Designer is easy to learn, highly configurable, and is robust in features that enable you to quickly produce or modify individual lessons or groups of lessons known as classes and courses. The key to content designed with this application is the ongoing ability of an instructor to change the course of the lesson or presentation at anytime.

Before you begin, you should be familiar with the Terminology in Chapter 2. This guide is specifically designed as a reference manual and should be used to supplement, not replace, the product training received as part of the purchase of a MILO product.

IES sincerely thanks you for your business.

IES Technical Support

IES Interactive Training offers 24/7 telephone technical support as well as email-based technical support. Please contact IES with any concerns or problems at:

Email: support@ies-usa.com

Phone: 1-800-344-1707

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Contents

INTRODUCTION.....	2
IES TECHNICAL SUPPORT	2
LICENSE & COPYRIGHT	2
CHAPTER 2 – TERMINOLOGY	5
CHAPTER 3 – USER INTERFACE.....	11
Starting MILO Course Designer	12
End User License Agreement Acceptance	12
Software Security	12
User Interface Overview.....	13
Main Menu	14
Main Toolbar	18
Play/Stop Buttons.....	18
Dynamic Toolbars	19
Docks	20
Workspace	27
Course & Class Editing View	28
Course Editing View.....	30
Class Editing View	31
Lesson Editing View	32
Timeline Control	37
CHAPTER 4 – LESSON ITEMS & EDITING VIEWS	38
Lesson Item Overview	39
Scene Lesson Item	41
Scene Editing View	44
Scene Events.....	45
Hitzones	57
Scenes with Templates	60
Slide Lesson Item	61
Slide Editing View	63
Slides with Templates	65
Question Lesson Item	66
Question Editing View	68
Video Lesson Item	74
Linked Items	76
Placeholders and Storyboards.....	77

Templates	78
CHAPTER 5 – SOFTWARE OPTIONS	80
General Options.....	81
Appearance Options	82
Folder Options	83
Score Categories	84
Scene Events.....	85
CHAPTER 6 – ADVANCED FEATURES	86
Packaging & Dependencies	87
Application Security.....	89
Scoring	90
Recording Audio	91
Video Playback Settings.....	92
Lesson Edit Wizard.....	93
Simple Capture	94
Simple HD Convert.....	96
VoiceOver	101

CHAPTER 2 – Terminology

This chapter provides an alphabetical list of application specific terms that are used throughout the user guide.

Branching

Branching is the term used in referring to the possible options any particular lesson item can follow. Branching can occur by keyed input from the Instructor or as a result of an action or lack of response on the part of a trainee or student.

Class

A class is a container, similar to a folder, used to store Lessons, files and other Classes.

Classroom

A classroom refers to a group of students who have been saved, in the MILO Classroom software.

Connection

A connection is the tie (line) between two lesson items. A connection is represented with a Pin on one lesson item with the line beginning at the Pin and extending to a second lesson item. The Connection has an arrow pointing to the item it is connected to indicate the direction of the connection.

Control(s)

Control, or controls, are used to refer to buttons, menus, lists, drop-down lists, radio buttons, checkboxes and other item in the software that users can click on or select.

Course

A Course is a container, similar to a folder, used to store Classes, Lessons, files and other Courses.

Decision Event

A decision event is used to capture responses from a trainee or student during a time window. The time window is created as an event within a scene, using Course Designer.

Dependencies Report

Dependencies Report indicates all of the files which a given Course, Class or Lesson uses through linking. It is typically used in troubleshooting missing lesson components or in preparing to package a Course, Class or Lesson.

Dock

A dock is a sub-window of an application that contains some portion of that application's graphical user interface. Docks are typically used to allow resizable screens, multiple screen resolutions, and customizable screen layouts.

Dynamic Toolbars

Dynamic toolbars are used throughout the editing of Courses, Classes, Lessons and Lesson Items. The contents of the dynamic toolbar are relative to the item that the user is currently editing in the workspace.

DV (Digital Video)

DV is a format for digital video that uses less compression than Motion JPEG or MPEG but results in larger file sizes. DV is often used in simulation as it allows for very fast branching speeds.

Embed (Embedded Item)

The term used to describe a component of a lesson (image, slide, etc.) that is an integrated part of the Lesson file. The alternative is a linked component.

Escalation

The term used to refer to the current escalation level of a scene.

Escalation Event

An escalation event is created by a user in Course Designer to change the escalation level of a situation based on the content of the scene the escalation event is being created in.

Hierarchy

Hierarchy is the term used in referring to the logical organization that makes up a collection of Courses, Classes and Lessons. The user is not bound to the hierarchy of a Course containing Classes, which contain Lessons. It is simply provided as logical hierarchy to organize curriculum.

Hitzone

A Hitzone is an item or subject in a video which allows the use of a simulated weapon to interact with the lesson. Hitzones can have one or more shapes to define the item.

Hot Key

A hot key is the keyboard key assigned to a specific Pin on a lesson item. The Hot Key is created and controlled by the instructor, and is used to allow the instructor to control the branching of lesson as needed.

Information Event

An Information Event is used to convey information during a scene. Typically an Information Event is represented as text changing or appearing over time.

Instructor

An Instructor is the person operating the software, responsible for key operation, scoring and trainee assessment. The Instructor is also referred to through out this manual as “trainer” or “user”.

Interlaced Video

A type of video where the image sensor (CCD) used for filming the video scans odd (or even) lines of the image sensor (CCD) first then scans the even (or odd) lines next. This typically results in good motion quality but visible combing effects during horizontal screen motion.

Keypad

A hand held device used to answer question and respond during a training session.

Lesson

A lesson is a sequence of lesson items (slides, video scenes, questions, etc.) that meet a specific training objective. Typically it achieves the lesson objective by requiring a trainee or student to interact with the lesson. When a lesson is run, it is referred to as a training session.

Lesson Item

A lesson item is the most fundamental component of a lesson. It is used to display and possibly react to an instructor or student’s input. Types of lesson items include slides, scenes, videos and questions.

Link (Linked Item)

A link is a generic term for a pointer to a document or other resource used by a component of a lesson or other system feature such as Advanced Debrief. The alternative is an embedded item. Images and videos are usually linked to rather than embedded.

Morph Point

A Morph Point is the point in time where a shape in a Hitzone changes in some way.

Motion JPEG (MJPEG)

MJPEG is a format for digital video that uses higher compression than DV but less compression than an MPEG format. MJPEG is a good medium between DV and Mpeg formats. MJPEG is typically used in simulation as it allows for fast branching speeds compared to MPEG formats.

MPEG (1, 2, 4, etc.)

The MPEG (Motion Pictures Experts Group) standards define many different formats for digital video. All MPEG formats have a primary goal of highly compressed yet good quality video. Most MPEG formats do not support real video frames. Because of this, MPEG2 and MPEG 4 should not be used for interactive simulation, as they are inherently not frame based and cannot branch quickly. However they are excellent candidates for play only video files as they offer the potential for good video quality and small file sizes.

OC

Abbreviation for Oleoresin Capsicum. Also refers to Mace or pepper spray.

OC Event

An event used to allow a response based on a trainee's use of an OC weapon.

Outcome

A generic term for the results of a trainee's reaction to a given situation.

Package

A file (Course, Class, Lesson) created by using the packaging wizard. Typically contains all necessary files, including audio and video resources, to run the lesson on another MILO system.

Pin

The term used to define possible exit to a lesson item. A Pin is defined on a lesson item for each possible outcome for that lesson item.

Placeholder

A Placeholder is used to temporarily represent a lesson item during the initial design of a lesson. Typically a lesson is created using placeholders. Then the lesson is printed and used as a reference guide in filming the lesson's video. Placeholders cannot be played; they must be replaced with another lesson item, before the lesson can be run.

Progressive Video

A type of video where the image sensor (CCD) used for filming scans the entire image sensor in one trace from top to bottom, moving from left to right on each row. This typically results in a film-like effect. Progressive video is the de-facto standard for most High Definition video formats.

Question Lesson Item

A lesson item used to solicit input from the students or trainees during a session. The question can be True/False, Multiple Choice, or Multiple Answer. The answers from each student or trainee are stored in the session's log for review during debrief or session review. A question is the only lesson item that can react to keypads.

Ratio (Video)

The ratio of a video defines the number of horizontal units for each vertical unit of a video or display device. For example, a typical computer monitor uses a 4x3 ratio screen. The resolution of the screen may be 640 pixels by 480 pixels, but the ratio is still 4x3. High definition video and many theatre films use a 16x9 ratio video. This video ratio is closer to the human field of view, in that it is almost twice as wide as it is tall.

Scene Event

Scene events (typically referred to as “events”) are used to define interactivity in a scene. For example a shot scene event is used to define what happens when a trainee fires at a target on the screen.

Scene Lesson Item

A Scene lesson item used to create lesson interactivity using video. A scene is a segment of video, with user defined start and end points (frame). A scene is the only lesson item that can react to simulated weapons.

Score Categories

A pre-defined list of scoring categories used to assess a trainee or student’s performance in particular areas. Score categories are user definable.

Score Event

A Score Event is used to give a trainee or group of trainees a score in any number of categories during a scene lesson item.

Session

The process of running a student through a lesson is referred to as a session. Sessions can be saved as a file for review later in the future. It includes a log of everything that happened, the outcome and the scoring for the lesson. You can search for session files using the Session Lookup screen in the MILO Range or MILO Classroom. Sessions and their contents are not stored unless you explicitly choose to save them.

Shape (Hitzone Shape)

In Course Designer a shape with any number of sides. The term Shape, when used in Course Designer, refers to the shapes that are created within a Hitzone. Multiple Shapes may exist in each Hitzone just as multiple hitzones may exist for a single video file.

Shot Event

An event used to allow a response based on a trainee’s use of a firearm.

Slide Lesson Item

A lesson item defined in a course, class or lesson, which may contain images, audio or informational text.

Sound Effects

Sound Effects are used during a session to introduce auditory distraction or hints to the trainees or students. The Instructor can randomly choose to play any standard audio file in their sound effects folder.

Sound Effects Event

A Sound Effects event is used in a scene lesson item to automatically play a sound effect to introduce auditory distraction or hint to the trainees or students.

Soundtrack

Soundtrack is a feature in Course Designer that allows the user play an audio file during a slide or across multiple slide lesson items.

Storyboard

A scripted version of a lesson used to define the lesson prior to filming the supporting video.

Student(s)

The person or persons participating or being tested during the session.

Taser Event

An event used to allow a response based on a trainee's use of a Taser.

Templates

Preconfigured slide used to assist in creating a consistent look to a lesson's slides, question, scene and videos.

Threat Event

A threat event is defined by the user and typically occurs at a point in a scene when the trainee is at risk of attack or injury. The Threat event can be used to gauge reaction time as well as their judgment.

Trainee(s)

The person or persons participating or being tested in the MILO Range system

Video Lesson Item

A lesson item used to display an entire video instead of a portion or clip of it. Typically used for displaying non-interactive types of video such as MPEG2, MPEG4 or DivX.

Video Frame/Field

A video frame is the unit of data that represents the image created by scanning the entire contents of an image sensor. A video field represents the image created by scanning either the odd or even lines of the image sensor. For interlaced video, two video fields make up a single video frame. In North America and some other countries, 30 video frames or 60 fields are used for each second of video. In most places outside the USA, 25 video frames or 50 fields are used for each second of video.

Video Compression

Video compression generally refers to an algorithm used to sample a video and output it in another format, with less data. In all cases where video compression is used, the resulting video file has lower quality. The trick to using video compression is to make the compression unnoticeable to the viewer. There are many different techniques to achieve good compression without making the video quality noticeably degraded.

Weapon

Any item capable of being used to implement a force option.

CHAPTER 3 – User Interface

This chapter will familiarize you with the user interface of the MILO Course Designer software.

Starting MILO Course Designer

The MILO Course Designer can be launched by double-clicking on the Windows desktop shortcut, or by selecting the appropriate shortcut on the Windows Start Menu. An initial splash screen will be displayed, followed by EULA acceptance, and software security, if applicable.



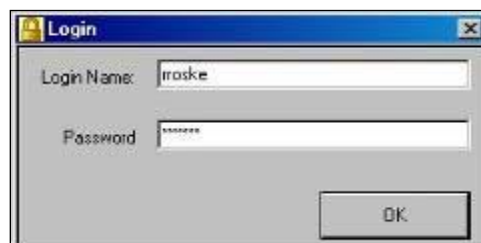
Splash Screen

End User License Agreement Acceptance

In order to utilize the MILO Course Designer software, you must accept the End User License Agreement ("EULA"). The EULA will need to be accepted once each day the software is used. Note that the EULA is accessible for you to review, from this EULA acceptance screen. The EULA may change from time to time with software updates or pagers, so be sure to review it before accepting it.

Software Security

MILO Course Designer is a security-controlled product. If your system administrator has added application users with the User Admin tool, you will be required to log on with an appropriate account in order to use MILO Course Designer.



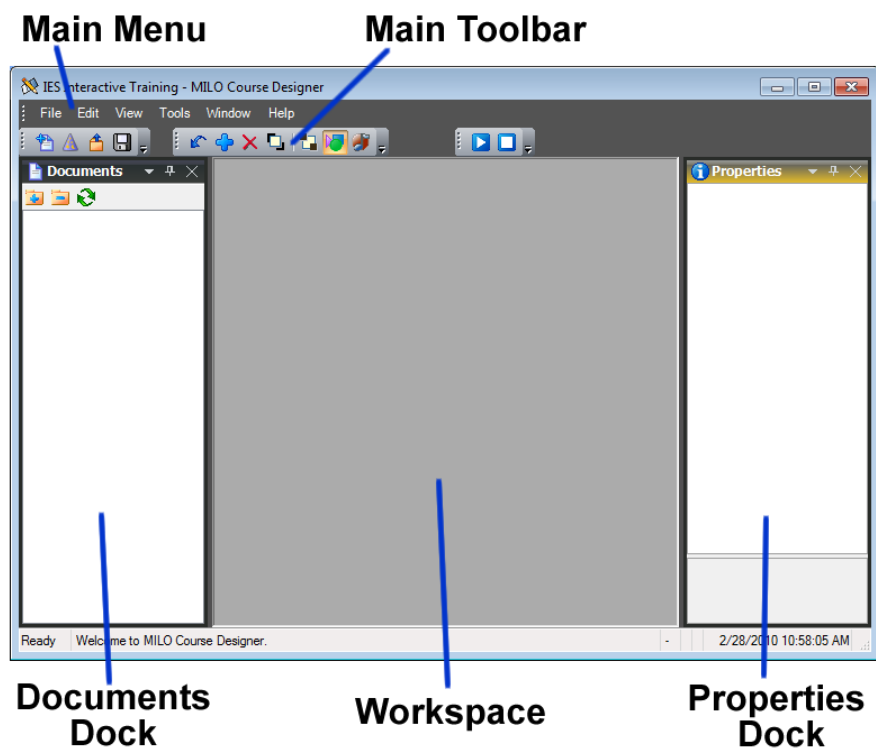
Login Screen

User Interface Overview

The MILO Course Designer interface is divided into several key sections. This allows the user to have quick access to a variety of different information and controls without having to open and close windows and screens.

The most important part of the interface is the Workspace. The workspace is where you view and edit all of your Courses, Classes, Lessons and lesson items such as Slides, Questions and Scenes. Each type of item will have a unique editing view that opens in the workspace. Along with all of the Menus, Toolbars and Docks, which are there to help edit and create items in the Workspace, you will use the various editing views to create your lessons.

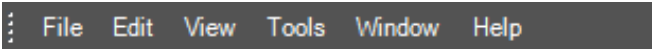
MILO Course Designer automatically determines what you have selected in the workspace and makes the appropriate changes to the rest of the user interface for you. For example when you have the Scene Editing view open, the properties dock shows the properties for the Scene, the Events menu is added to the main menu, and the scene edit view toolbar is made available below the main toolbar..



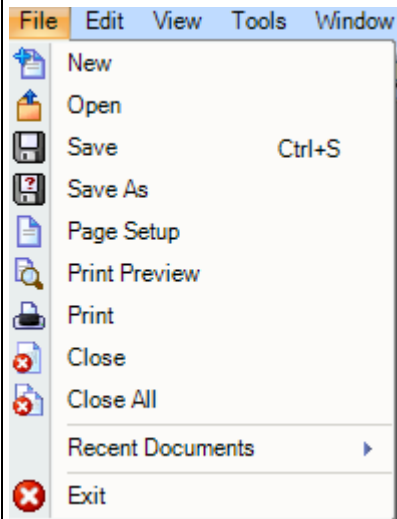
Course Designer User Interface

Main Menu

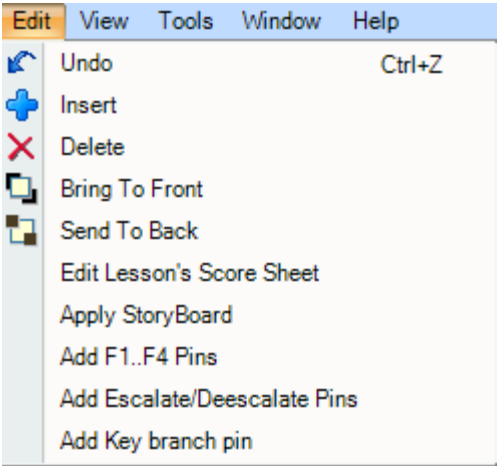
The Main Menu has all the basic functions available in the form of pull-down menus. Depending on which editing view is currently open in the workspace, some items may or may not be available on all menus. On the following pages is a summary of the options and functionality available on each of the menus.



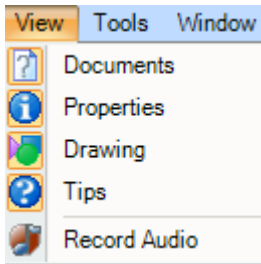
Main Menu

File Menu	
	New: Opens the New File screen, shown in the figure below, to create a new file.
	Open: Opens a Windows file browse screen allowing the user to browse and select a file to open.
	Save: Save the current file in the workspace. This can also be performed using the CTRL+S keyboard stroke.
	Save As: Save the file in the workspace as another file type or file name.
	Page Setup: Edit the page setup for printing.
	Print Preview: View preview of the layout of the current item in the workspace before printing.
	Print: Print the current item in the workspace.
	Close: Close the current item in the workspace.
	Close All: Close all items open in the workspace.
	Recent Documents: A list of the recently opened items.
	Exit: Exits the MILO Course Designer application.

Edit Menu

	Undo: Undo the last action. This function is available for lesson editing view only.
	Insert: Opens the Insert item screen to insert a new item into the current item in the workspace. Similar to new file.
	Delete: This will delete the currently select ed item in the workspace.
	Bring To Front: When two objects overlap in lesson or slide editing view, this menu item will set the selected item to be the top most item.
	Send To Back: When two objects overlap in lesson or slide editing view, this menu item will set the selected item to be the bottom most item.
	Edit Score Sheet: Opens the score sheet editing screen for the current lesson in the workspace. This menu item will only be available if a lesson is open in the workspace.
	Apply Storyboard: Opens a file browsing screen to select a storyboard or lesson to apply or copy into the current lesson.
	Add F1-F4 Pins: Adds 4 (four) pins, each with a Hot Key and an immediate Hot Key assigned, to the currently selected lesson item in lesson editing view. This menu item will only be available when a lesson item is selected.
	Add Escalate/De-Escalate Pins: Adds 2 pins, named escalate and Deescalate, each with a Hot Key and an immediate branch Hot Key assigned, to the currently selected lesson item in lesson editing view. This menu item will only be available when a lesson item is selected.
	Add Hot Key Pin: Prompts user to enter a Hot Key from the keyboard which is then assigned to a newly created pin on the selected lesson item. This menu item will only be available when a lesson item is selected.

View Menu

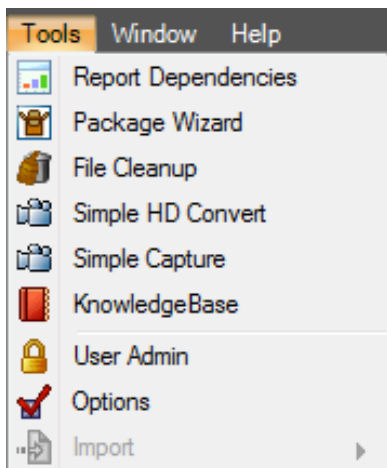


Documents, Properties, Drawing, & Tips:

This menu is available at all times. It controls the display of the various docks available in the Course Designer. Selecting any of the first four items will open or close the appropriate dock.

Record Audio: This will open the audio recording screen.

Tools Menu



Report Dependencies: Generates a report of all resources used in a MILO file such as a Course, Class, Lesson or Slide.

Package Wizard: Opens the package wizard. This is discussed further in Chapter 6.

File Cleanup: Opens a file browsing screen to select a Course Designer file to clean.

Simple Capture: Opens the Simple HD Convert software to capture High Definition video.

Simple Capture: Opens the Simple Capture application to capture DV video.

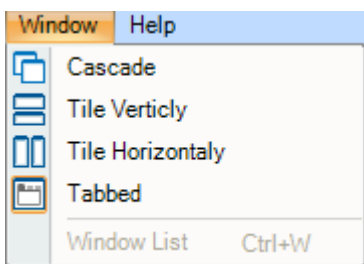
KnowledgeBase: Opens the KnowledgeBase plug-in if it is installed in the system.

User Admin: Opens the user administration screen.

Options: Opens the Course Designer options screen.

Import: This sub-menu will allow you to import various types of files into Course Designer. It requires optional plug-ins to be enabled.

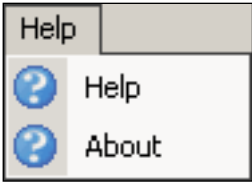
Window Menu



This menu is divided into two sections. The top four options allow the user to organize the windows in the workspace.

The bottom section allows the user to select which window or tab in the workspace is the currently selected view.

Help Menu



Help: Opens the Course Designer user guide.

About: Opens the MILO Course Designer about screen.

Main Toolbar

The main toolbar makes several of the most common functions on the main menu available as buttons. In addition there are two buttons to control the playback of video, audio and lessons.



Main Toolbar

In order from left to right the buttons represent the following functions, which are also available on the main menu:

- New (File)
- Open (File)
- Save
- Undo
- Insert
- Delete
- Bring To Front
- Send To Back
- Drawing Tools
- Record Audio
- SpellCheck
- Play
- Stop

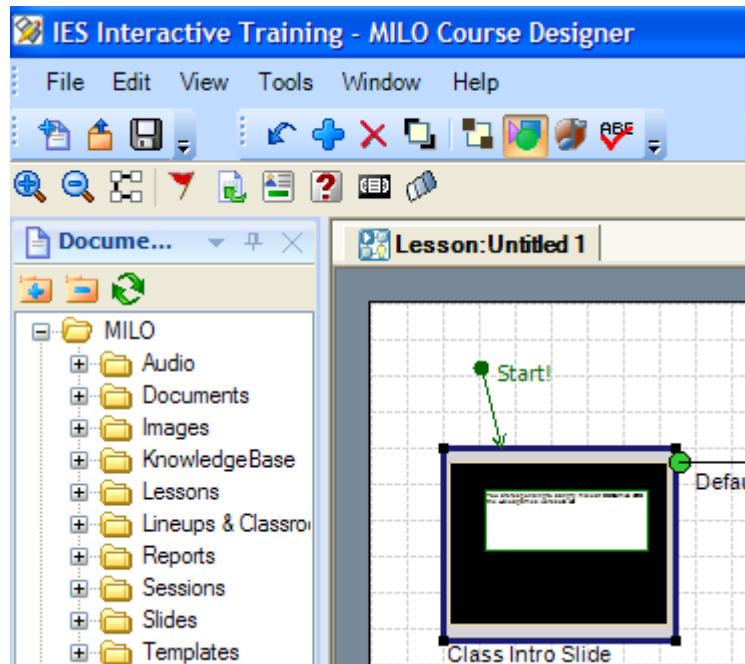
Play/Stop Buttons

Whenever there is a video based lesson item or the Hitzone editing view open, you can click the Play button to begin playback of that video. It will automatically stop at the end of the item, or you may click the Stop button to stop playback.

When the lesson editing view is open, the Play button will allow you to simulate the playback of the lesson you are editing. In addition you can interact with the lesson using Trainer weapons and/or Hot Key assignments to cause branching just as you would in the Classroom Trainer or MILO Range.

Dynamic Toolbars

The purpose of the dynamic toolbar is to provide functionality specific to certain editing views in the workspace. Therefore, the dynamic toolbar changes its buttons and functionality depending upon the item that is currently open in the workspace. The dynamic toolbar is located directly below the main toolbar. There are dynamic toolbars for Course and Class editing views and well as Lesson, Scene, Slide and Template editing views. Additional dynamic toolbars are available when application plug-ins such as the MILO Course of Fire is installed. Details for each are given in the appropriate editing view sections of this user guide.



Dynamic Toolbar

Docks

There are two primary docked windows in MILO Course Designer, Documents and Properties. There are other docks, which are hidden by default, Tips and Pins. You can enable or disable some of these docks in the software options screen. Each dock contains a specific type of information or controls that may change depending upon what is open in the workspace. The docks available in MILO Course Designer first opens are:

- Documents: The documents dock is provided as a quick and handy alternative to using the menu and toolbar to browse and select a file to open or add. The Documents dock is visible by default and can be hidden using the controls in the software options screen.
- Properties: The properties dock displays properties for the current item or lesson item in the workspace. The Properties is always visible when the software opens.
- Tips: The tips dock displays a relevant tip for the item displayed in the workspace. In some cases a video tutorial may also be accessed from the tips dock. The Tips dock is hidden by default and can be made visible in the software options screen.
- Pins: The pins dock displays all of the pins on the lesson item displayed in the workspace. The Pins dock is hidden by default and can be made visible in the software options screen.

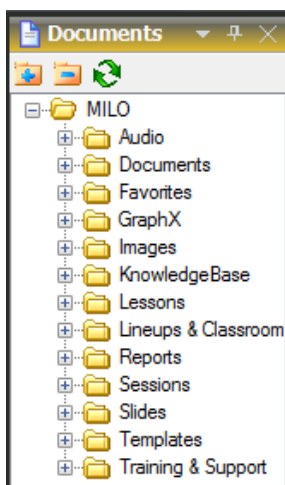
Docks also have several features that allow the user some flexibility with the user interface.

- Free Floating: By Click-Hold-Dragging on the title area of a dock you can change it into a free-floating window. Double-Clicking on the title bar again will return the dock to its original location.
- Collapsed: By clicking on the Pushpin icon in the title are of the dock you can collapse the dock. Only its title will be available on the edge of the workspace. By hovering the mouse over the title, the dock will pop out temporarily. Once the mouse leaves the dock, it will collapse again. You can set the dock to be in a fixed mode again by clicking on the Pushpin icon in the title area.
- Closed: By clicking on the close icon in the title area, you can close the dock. To reopen it, you can select it from the View menu.

NOTE: The arrangement of the docks and toolbars is not saved when MILO Course Designer is closed. They will be reset once Course Designer is reopened. This is intentional and is designed to prevent the user from potentially corrupting their application layout.

Documents Dock

As mentioned earlier, the documents dock is essentially a shortcut to the folders on your system. The dock can be used to quickly open Lessons as well as other items such as video files, templates and slides.



Documents Dock

To add folders to the Dock:

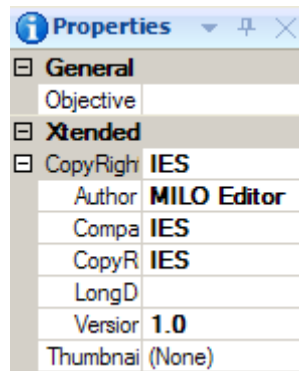
1. Click the add folder button.
2. Browse & select the folder you wish to add.
3. Click OK.
4. The folder appears in the dock.

To remove folders from the dock:

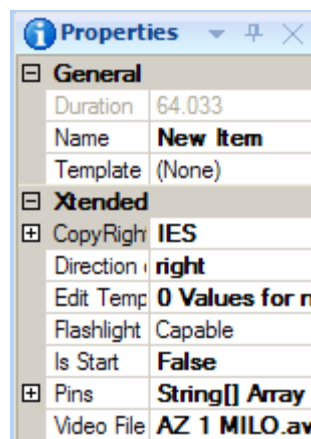
1. Select the folder in the dock you wish to remove.
2. Click the remove folder button.
3. The folder is removed from the dock.

Properties Dock

The properties dock displays properties for the currently item in the workspace. When the text title of a property is grayed out it cannot be edited or changed.



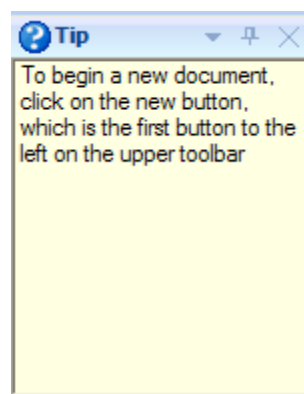
Lesson Properties Example



Scene Properties Example

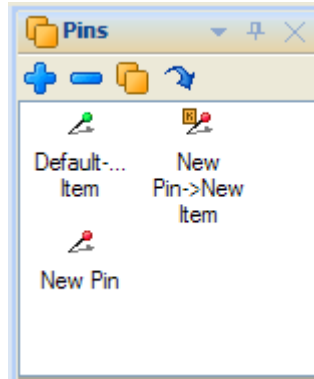
Tips Dock

The tips dock displays a relevant tip for the current item in the workspace. In some cases, a hyperlink may be available which will open a tutorial video for the current item in the workspace. To scroll through the available tips, click anywhere in the Tips dock. You can hide the tips dock if you wish by unchecking the appropriate option on the Course Designer options screen, on the startup tab.



Pins Dock

By default, the Pins dock is hidden. You can enable it in the software options screen, or by using the View menu. The Pins dock displays all of the pins on a lesson item when that lesson item's editing view is open. Recall that pins are used to connect one lesson item to another.



Pins Dock

When a pin on one lesson item is connected to another lesson item, the system can branch from the first lesson item to the connected lesson item. Branching can occur for three reasons:

- The current lesson item ended
- An student interaction with the system
- An instructor selected a branch option

The pins dock is primarily available to allow you to assign Hot Keys. However you can also add and remove pins as well as set and change the lesson items that the pins are connected to. There are four buttons on the toolbar at the top of the Pins Dock:

- New Pin: Add a new pin to the current lesson item.
- Remove Pin: Remove the selected pin in the dock.
- Add Hot Key to pin: Open the Hot Key assignment dialog for the current pin selected in the dock.
- Pin Connection: → Opens the connection window to select a new item to connect this pin to.

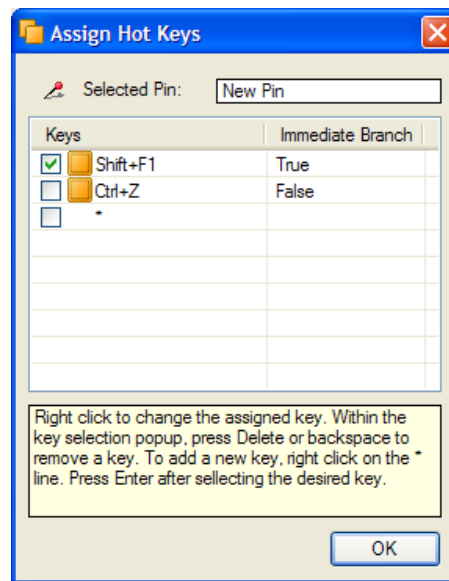
In the Pins dock, for each pin, there is an icon along with the name of the Pin followed by an arrow ("→") which points to the name of the lesson item the Pin connects to (if any). For example a pin named "Majority Incorrect" which branches to a slide titled "Wrong Answer" would appear as "Majority Incorrect →Wrong Answer".

A pin with a green head is the default pin. This is the pin or branch path that will be followed from the lesson item if no trainee or instructor action causes a system reaction. Pins with the red head, can only become the branch path as a result of a student or instructor action.

Assigning Hot Keys

Hot Keys are the keyboard key assignment given to a pin to allow the instructor to cause the system to branch from lesson item to lesson item. Hot Keys are not necessary when pins were created using the "Add Instructor Branch Pin" method, as a clickable icon will automatically be created on those pins.

You can assign Hot Keys by double-clicking on a pin in the Pins Dock, or by right-clicking on a pin in the lesson editing view and selecting "Assign Hot Key". Note that you cannot assign hot keys to pins that were created as "Instructor Branch" or "Trainee Branch" pins.



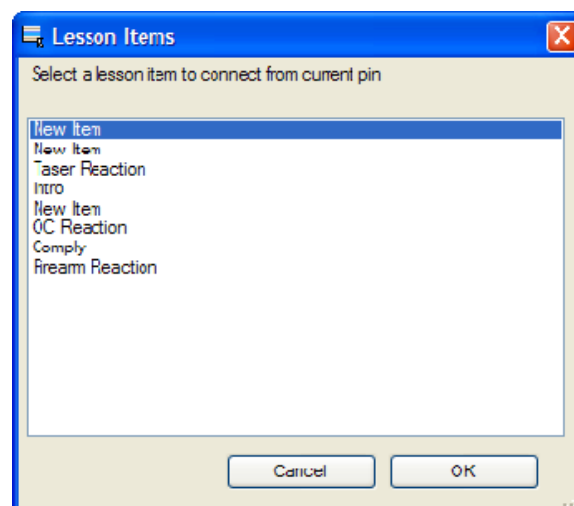
Hot Key Assignment Screen

In the Hot Key assignment screen, right-click on any line, and set a new Hot Key for the Selected Pin. When you have typed the keystrokes you wish to assign to the Pin, press the enter key. If you wish to set the branch for that keystroke to cause the system to branch immediately, be sure to select the checkbox for that Hot Key.

If you are assigning Hot Keys from the pins dock rather than from the lesson editing view, notice that once a Hot Key is assigned to a Pin the icon will change in the Pins dock to indicate that there is a Hot Key assignment on the pin.

Connecting Pins to Lesson Items

Normally you can connect lesson items in the lesson editing view by Click-Hold-Dragging the pin to the desired lesson item. However you may also connect Pins by selecting them in the Pins dock and clicking the Pin Connection button on the Pins dock toolbar. In the resulting screen, you can select the lesson item to connect the Pin to and click OK.



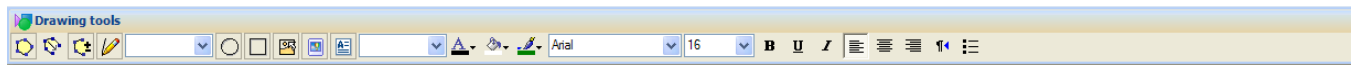
Pin Connection Screen (Lesson Item List)

Drawing Tools Dock









The drawing tools dock is available only for lesson items that are slide based. MILO Course Designer can draw text, shapes and images on slides and any lesson item that is displayed as a slide such as Questions. There are







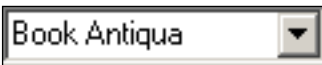








multiple sets of controls on this dock to allow the user to draw freeform shapes, predefined shapes, text boxes, add images and set border, fill and font settings. The table below summarizes the controls available in the drawing tools dock.

When an item on the slide is selected, the settings for that item are reflected in the Drawing Tools dock. If no settings for the item have been selected by the user, the default settings are applied and shown in the dock.



Drawing Tools Dock

Drawing Tools		
	Draw Shape	A tool to draw a freeform shape by defining points which the system will automatically connect with lines. New shapes will have the last used border and fill color applied to them. You can change them colors by using the Border and Fill color controls.
	Open/Close Shape	A setting to open or close the selected shape on the slide.
	Add/Remove Points From Shape	A tool to allow adding or removing points from a shape on the slide.
	Draw Line	A tool to draw a line by Click-Hold-Dragging to define the location and length of the line on the slide. New lines will have the last used border color applied to them. You can change this by using the Border color control.
	Line Arrow Format	A setting that defines the type of arrows for a line on a slide.
	Draw Circle	A tool to draw a new circle on the slide by Click-Hold-Dragging on the slide to define its size and location. New circles will have the last used border and fill color applied to them. You can change the colors by using the Border and Fill color controls.
	Draw Rectangle	A tool to draw a new rectangle on the slide by Click-Hold-Dragging on the slide to define its size and location. New rectangles will have the last used border and fill color applied to them.
	Set Transparent Image Color	A tool to pick a color on an image already in the slide, which will be treated as transparent. Once the color is selected, all the pixels of the image with that color will become transparent.

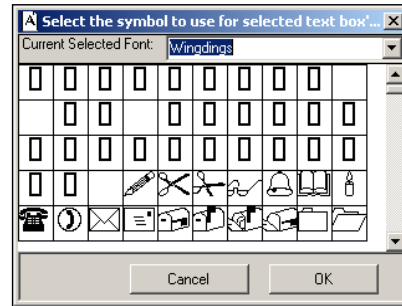
	Add Image	A tool to select an image on the system and Click-Hold-Drag to draw its size and location on the slide. New images will have the last used border and fill color applied to them. You can change the colors by using the Border and Fill color controls.
	Add Text Box	A tool to draw a new text box on the slide by Click-Hold-Dragging on the slide to define its size and location. New text boxes will have the last used font, border and fill colors applied to them.
	Line Thickness	A setting that defines the thickness of a line or border of the current item selected on the slide.
	Font Color	A setting that defines the color of the font for the currently selected text box on the slide.
	Fill Color	A setting that defines the fill color of the currently selected shape, text box or image on the slide.
	Border Color	A setting that defines the border or line color of the currently selected shape, text box, line or image.
	Font Type	A setting that defines the font type (name) for the currently selected text box on the slide.
	Font Size	A setting that defines the font size for the currently selected text box on the slide.
	Bold Text	A setting to make the text of the currently selected text box Bold.
	Underline Text	A setting to make the text of the currently selected text box Underlined.
	Italics Text	A setting to make the text of the currently selected text box Italicized.
	Left Align Text	A setting to make the text of the currently selected text box left aligned.
	Center Align Text	A setting to make the text of the currently selected text box center aligned.
	Right Align Text	A setting to make the text of the currently selected text box right aligned.
	Right to Left Text	A setting to make the text of a text box use right to left functionality. This is for right-to-left languages only such as some Asian languages and Hebrew.



Bullet List

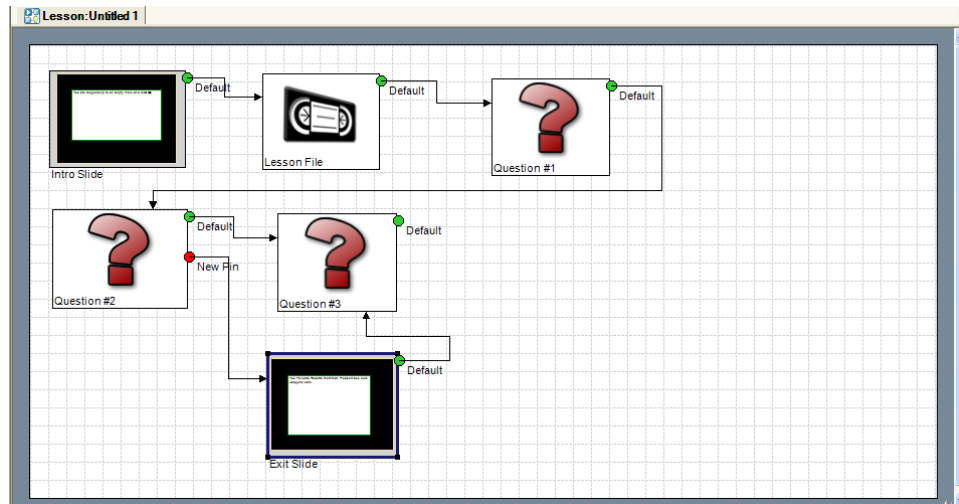
A setting to make the text of the currently selected text box appear in a bulleted list.

NOTE: Right-Click on the button to view the window that allows you select the icon used for the bullet.



Workspace

The workspace is the editing area in the center of the MILO Course Designer screen. This is where the various editing views will appear during the process of editing. The workspace allows multiple views to be open simultaneously. As you open additional views, each will be on its own tab with the title at the top of the workspace. Clicking on the tab title of another item will switch to that item in the workspace. Additionally, you can arrange the items as windows rather than tabs using the Window menu. The example below shows the workspace with a lesson open (lesson editing view).













Lesson Editing View in Workspace

Course & Class Editing View

As with everything else that is designed or edited in the MILO Course Designer, the Course and Class editing views are displayed in the workspace. The Course and Class editing views are unique in that they are presented in a list view. The reason for this is that Courses and Classes are collections of other items, rather than a graph or chart of connected items.

Course & Class Toolbars

The toolbars for Course and Class editing views are essentially identical except for the last few buttons. Since Courses typically contain Classes, there is an “Add Class” button on the Course Edit View toolbar when a Course editing view is open. And since Classes typically contain Lessons and Subjects there two buttons available on the Class Edit View toolbar to add these items when a Class editing view is open. The following tables describe the functionality of the toolbar for each editing view.

<i>Course & Class Dynamic Toolbar Functions</i>		
	New Linked Item	Allows user to Browse & Select an existing lesson item or document to add to the list. It will be linked rather than embedded.
	Move Item Up	Move the selected item in the list up by one.
	Move Item Down	Move the selected item in the list down by one.
	Open Item	Open the editing view for the selected item.
	Add Folder	Add a folder to the list. You can use folders to store resources for the Class or Course.
	Rename Item	Rename the selected item in the list.
	Embed Item	Allows user to Browse & Select a file to embed into Class or Course.
	Add Class	Add a Class to the Course.
	Add Subject	Add a Subject to the Class.
	Add Lesson	Add a Lesson to the Class.

Course & Class Properties

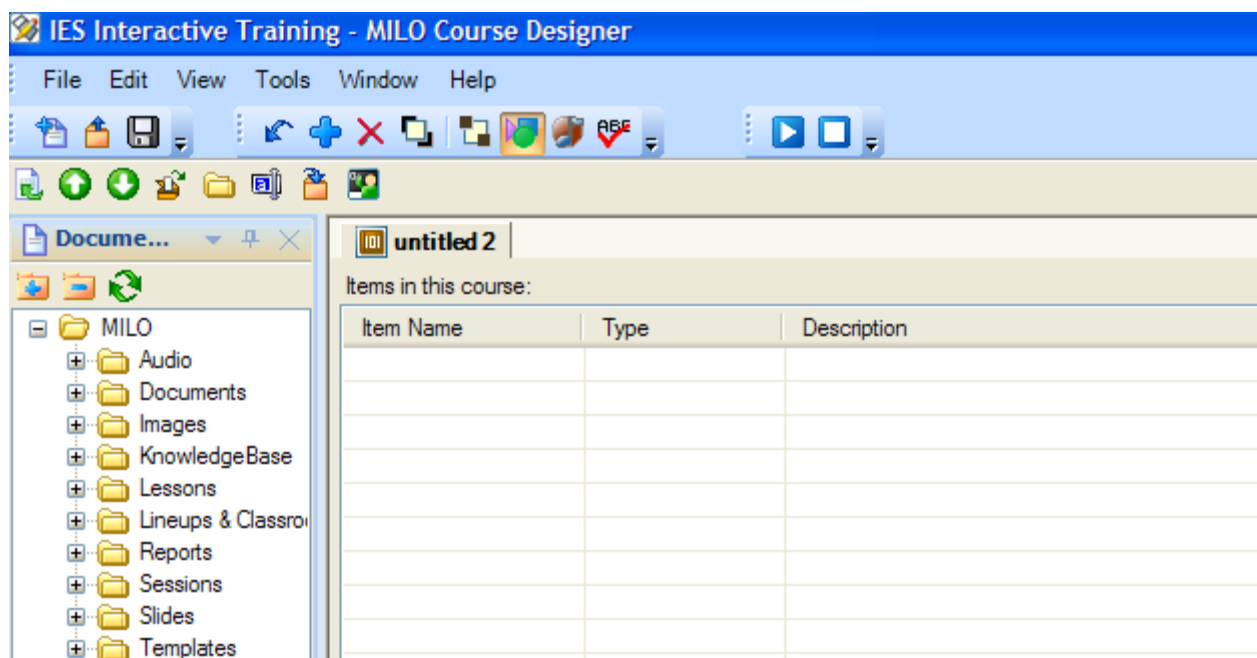
The various items you can add to a Course or Class have similar properties which can be set to help instructors, who are not familiar with the curriculum navigate through the Course or Class. For all files you add to Courses and Classes, there are standard properties you can define in the properties dock.

<i>Course & Class Item Properties</i>	
Description	A text description, which you can type to describe the item in the list.
Hidden	A drop-down menu setting that allows the selected item in the list to be hidden. This can prevent it from being seen in MILO Classroom or MILO Range.
Link	A setting determined by Course Designer that indicates whether or not the selected item in the list is a link or not. This setting cannot be changed.
Name	The name of the selected item in the list. It cannot be changed here. To change the name, Right-Click the item in the list or use the appropriate Course/Class toolbar button.
Thumbnail	A setting that allows the user to select an image which will represent the item when it is displayed in Lesson Browsers of MILO Range and MILO Classroom.

NOTE: If a file, which is not a Course Designer file, is embedded into a Course or Class, you cannot set any properties for it.

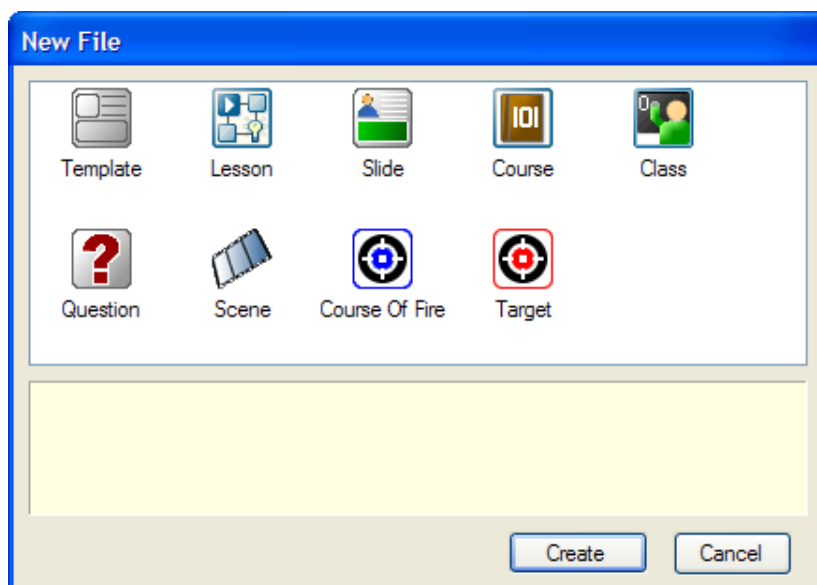
Course Editing View

The Course editing view is provided to create a collection of training items that are related in some way. In the Course Editing View, the user is primarily concerned with creating top-level container for all other curriculum. Typically a Course might be as generic as “Big City PD” which contains all the Classes, Lessons and Scenarios that Big City PD uses in its training. Conversely, it may be a more refined category such as “Pistol Course” which may contain several classes each with several lessons all pertaining to learning or participating in the Pistol Course.



Course Editing View

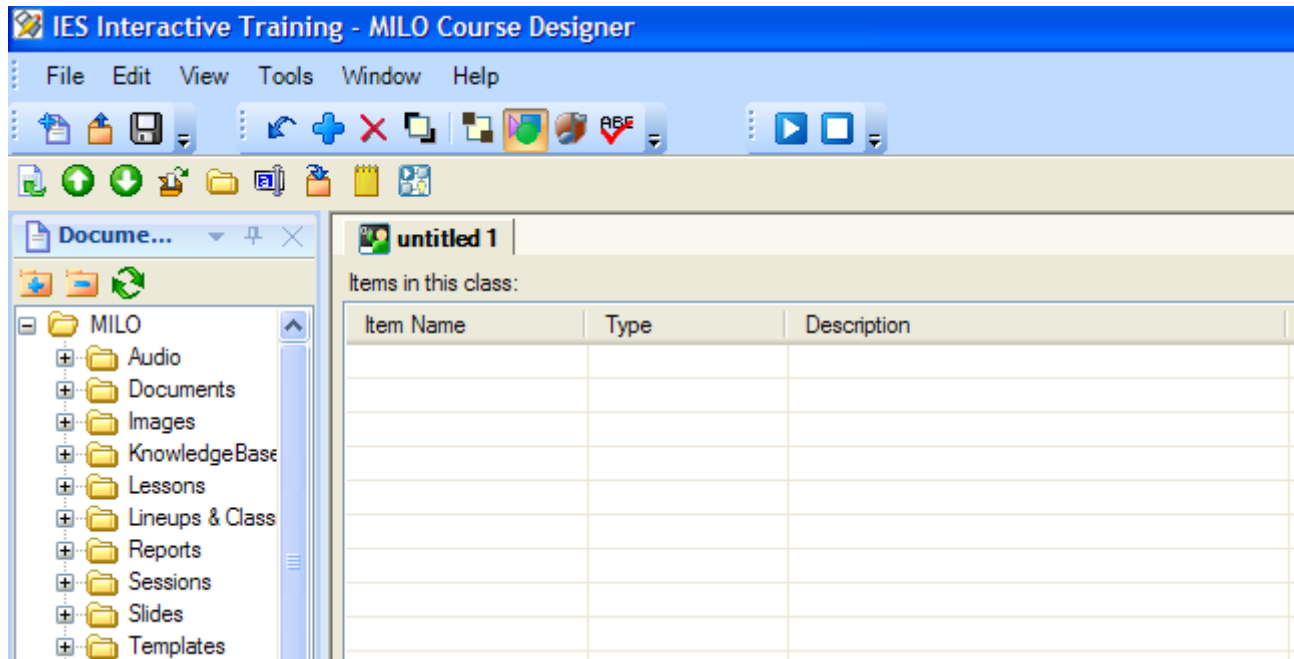
You are not limited to adding only Classes and Folders to Courses. In fact, you can add any file type. Using the Insert button on the main toolbar will allow you to add any file to the Course item list.



Insert File Screen

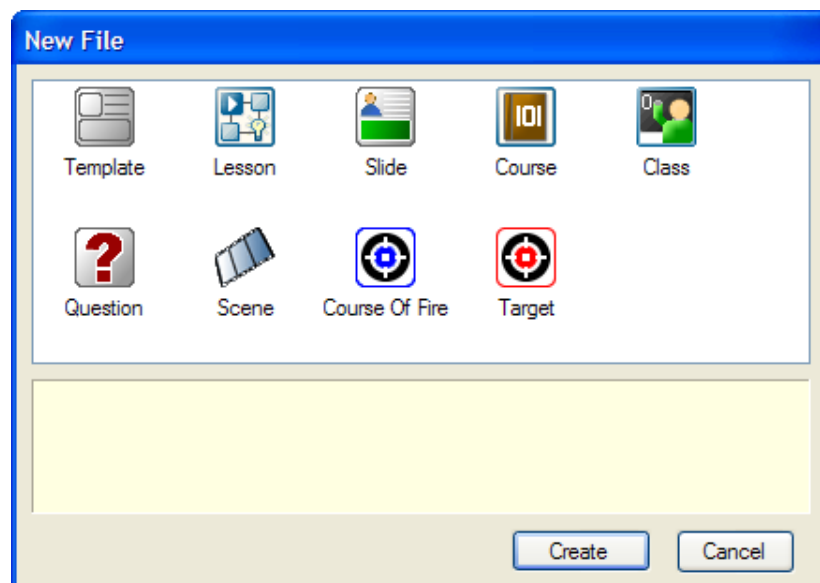
Class Editing View

The Class editing view is provided to create a collection of training items that are related in some way. In the Class Editing View, the user is primarily concerned with creating a 2nd-level container for lessons on a particular subject or series of topics. Typically a Class might be as generic as “Academy Lessons” which contains all the lessons and scenarios that new academy recruits go through at Big City PD. Alternatively, it may be a more refined category such as “Intro to Domestic” which may contain several lessons all pertaining to learning about Big City PDs policies and training curriculum related to Domestic Disputes.



Class Editing View

You are not limited to adding only Lessons and Subjects to Classes. Using the Insert button on the main toolbar will allow you to add any file to the Class item list.



Insert File Screen

Lesson Editing View

The Lesson editing view is used for creating interactive lessons and presentations. It is displayed as a graph-type freeform drawing view. This allows the user maximum flexibility to draw their lesson items and the connections between them however they wish. Lessons in Course Designer are usually created for one of three specific purposes:

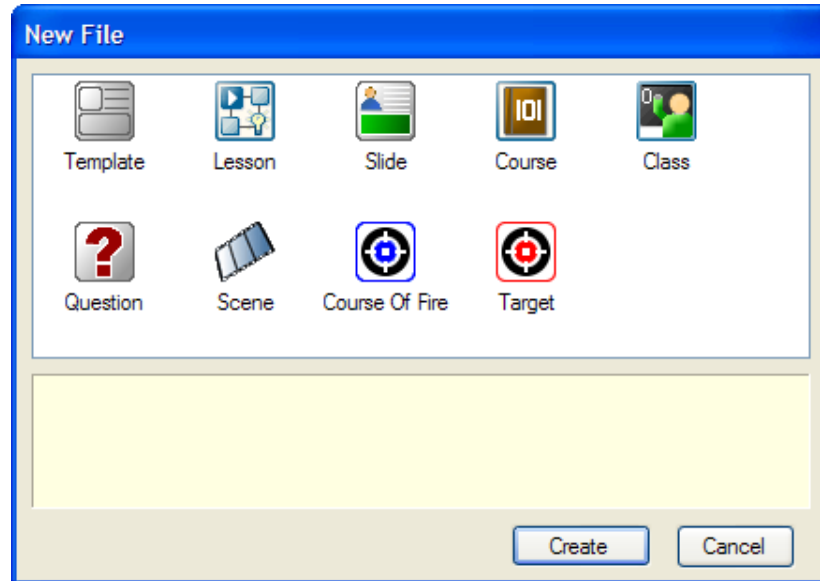
- Use-Of-Force Training
- Interactive Presentations
- Classroom Training/Testing

Lessons are built using lesson items. There are several types of lesson items available:

<i>Lesson Items</i>	
Scene	A scene lesson item is a video based lesson item used to allow interactivity in the form of branching or on-screen information changes. A scene can be an entire video or a portion of the video (clip).
Slide	A slide is a static, non-changing, presentation of text, shapes and images that conveys some information.
Question	A question is a slide with the added ability to gather user input to answer the question.
Video	A video lesson item differs from a scene in that it is a complete video from start to finish. You cannot set the In and Out points for a video lesson item. A Video lesson item is especially useful for long segments of video that can be highly compressed or do not require high-speed branching.
Placeholder	A placeholder is a special lesson item that is used to define or plan a lesson before all of the content is developed. Using placeholders you can draw out the entire lesson with all the pins and connections before having any video filmed. The placeholders are then printed to create a storyboard used in filming the video for the lesson.
Template	A template is used to control the way other lesson items appear. A template is based on a slide. Templates use a feature called Named Shapes which control where specific types of information such as video; images or text is displayed on the screen for Scenes and Videos as well as Slides and Questions. You cannot play a Template or use it as a lesson item; rather other lesson items use it to control their layout.
Linked Item	A linked item is actually any other lesson item, which has been saved as a standalone file. You can use these standalone files in multiple lessons by linking to them rather than having to recreate them in every lesson.

Creating Lesson Items

To create new lesson items you can use the File menu or the main toolbar button to access the New File screen. Additionally you can use the lesson editing view's toolbar and Drag & Drop functionality from the Documents Dock to create new lesson items. When using the main menu or main toolbar to create a new lesson item, you will Select the type of item you wish to create and Click the create button on the new file window. The mouse cursor will change to a thin crosshair. Then, Click-Hold-Drag the cursor to define the size and location of the new lesson item in the lesson editing view.

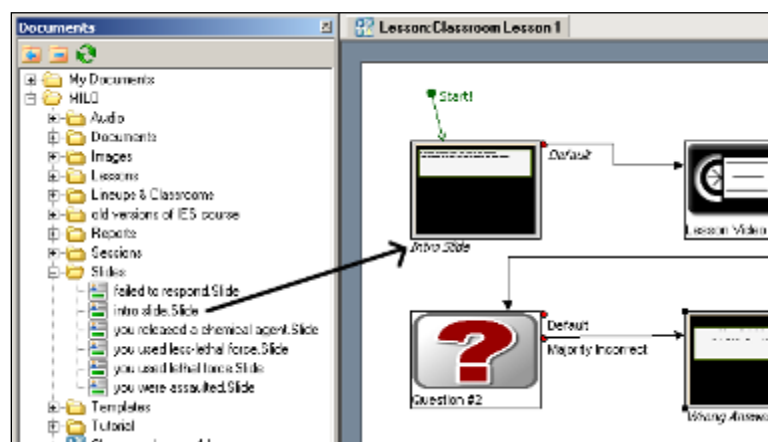


New File Screen

TIP: It is a good practice to rename lesson items as you add them to the lesson. You can do so by using the properties dock, caption setting, or by Clicking on the lesson item in the lesson editing view and typing a new name.

Drag & Drop Lesson Items

You can add existing lesson items on your system, such as Slides showing an agency logo or emblem, or a commonly encountered message. The lesson item must already exist in a folder that you can access in the Documents Dock in order to drag and drop it from the dock onto the lesson editing view.











Drag & Drop Lesson Items

Lesson Edit View Dynamic Toolbar

The lesson edit view toolbar in the lesson editing view provides several quick functions to create new lesson items as well as control the layout of the lesson. When using the toolbar to create new lesson items, Select the button for the appropriate lesson item you wish to create. The mouse cursor will change to a thin crosshair. Click-Hold-Drag the cursor to define the size and location of the new lesson item in the lesson editing view.



Lesson Editing View Toolbar

<i>Lesson Toolbar</i>		
	Zoom In/Out	These buttons allow you to zoom in and out on the lesson editing view.
	Auto Layout	Click to realign all the lesson items in the lesson editing view. The ideal alignment will be different for each lesson. It may require adjustment of the max number of auto-layout columns setting and the auto-layout resize settings in the Course Designer options screen.
	New Placeholder	Click this button then Click-Hold-Drag on the Lesson editing view to create a new Placeholder lesson item.
	New Linked Item	Click this button to Browse & Select a stand-alone lesson item file then Click-Hold-Drag on the Lesson editing view to create a new Placeholder lesson item.
	New Slide	Click this button then Click-Hold-Drag on the Lesson editing view to create a new Slide lesson item.
	New Question	Click this button then Click-Hold-Drag on the Lesson editing view to create a new Question lesson item.
	New Video	Click this button then Click-Hold-Drag on the Lesson editing view to create a new Video lesson item. After which you must double click the video lesson item to select a video file, or use the properties dock setting.
	New Scene	Click this button then Click-Hold-Drag on the Lesson editing view to create a new Scene lesson item. The system will automatically prompt you to select a video file and set the timeline (Start and End points) for the scene.

Connecting Lesson Items

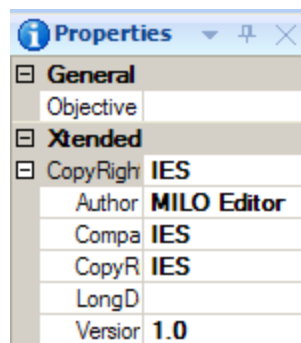
To connect lesson items, simply select the source lesson item so it is highlighted with the blue selection borders. Then, Click-Hold-Drag from the pin you wish to connect from, to the destination lesson item and release the mouse button. A connection line will be created. You can Click-Hold-Drag on the connection line to rearrange it or Right-click on one of the lesson items it is connected to and choose “Auto Layout Connections”.

Lesson Editing Graph

You can cause the arrangement and size of lesson items to be constrained to a grid. Right-Click on the lesson edit view and select Grid on the menu. All lesson items, when moved or resized will now snap to the grid lines. You can adjust the size of the grid lines in the options screen.

Lesson Properties

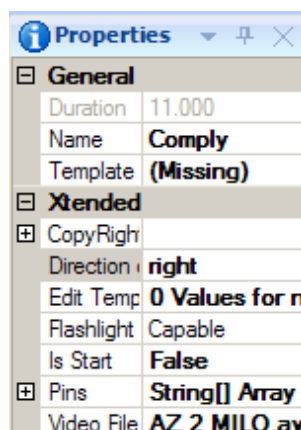
The properties for a lesson are fairly simplistic. They include the standard Copyright information available for most Course Designer files and an additional property called Objective. The Objective is usually used to summarize the training goals for this lesson. This information is especially helpful to instructors who are not familiar with the curriculum, as this information will be made available in the MILO Range or MILO Classroom systems prior to running the lesson.



Lesson Properties Dock

Lesson Item Properties

The properties available for lesson items will vary greatly. See the following chapter for a detailed description of each lesson item and its editing view for property information.



Lesson Item Properties Example (Scene Lesson Item)

Lesson Item Option Menus

There is an option menu available for each lesson item that can be accessed by Right-Clicking on the lesson item. There are several common functions available on the options menu for all lesson items. These are listed in the table below.

<i>General Lesson Item Option Menu</i>	
Replace With	Allows the user to select a lesson item to replace the current one.
Export As StandAlone	Save the lesson item as a standalone lesson item file. Most likely for use as a linked item in other lessons. Not applicable for Placeholders.
Set Starting Item	Set the selected lesson item to be the starting item for the lesson.
New Pin	Add a pin to the lesson item.
Properties	Refresh the properties for the lesson item in the properties dock.
Auto-Layout Connections	Organize and align the connections from the lesson item's pins to other lesson items.
Delete	Remove the lesson item.

Lesson Score Sheet

The Score Sheet for a lesson defines the score categories that will be used in assessing a student's performance in the lesson. You can manually define the list or it will be automatically created for you when you set scoring for Scene Events and Questions. Properties for each score category added to the score sheet can be set according to your needs. To reach the score sheet screen, right-click anywhere in the lesson editing view.

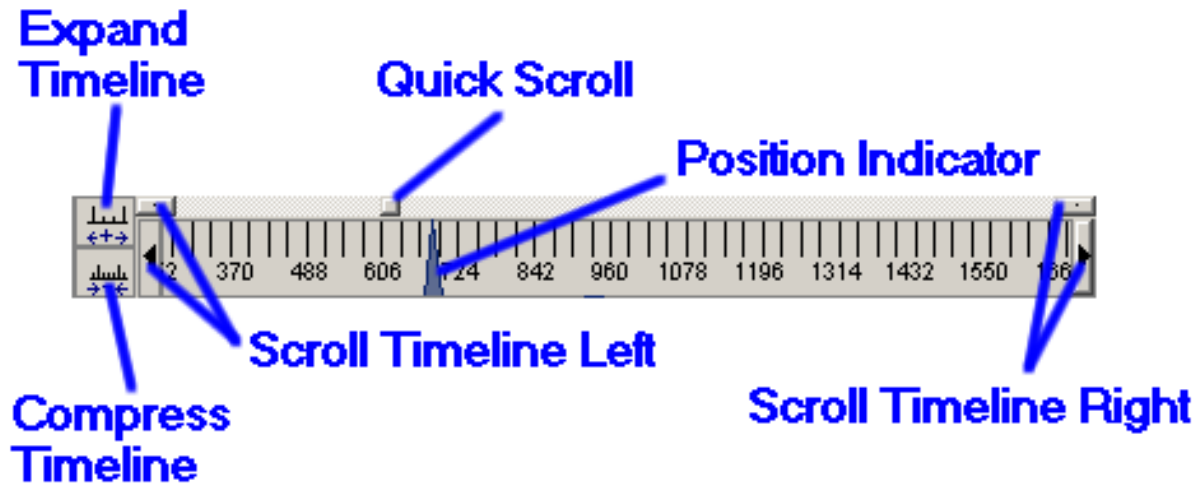
Category	Max Score	Calculated Max Score	Is Pass Fail	Preset Value
General	100	100	<input type="checkbox"/>	
Accuracy				
Reaction				
Judgment				
Verbalization				
Threat recognition				
Use of cover				

Lesson Score Sheet

Timeline Control

The timeline control is commonly encountered throughout the Course Designer. The timeline control is used in a variety of editing views and screens. However, in all cases, the functionality is the same. It provides a horizontally scrollable view that allows the user to move forward or backward within a video or section of a video.

- Click-Hold-Drag on the blue position indicator to scroll through the video.
- Click the right and left arrow buttons to scroll the timeline without changing the video position.
- Click the expand and compress timeline controls to change the scale (zoom level) of the timeline.




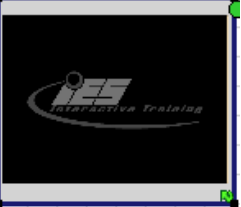

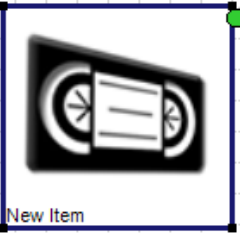
Timeline Control

CHAPTER 4 – Lesson Items & Editing Views

This chapter will describe the various lesson items and their editing views.

Lesson Item Overview









Lesson items are the building blocks of lessons. Some lesson items are interactive by nature while others are non-interactive. Course Designer supports many different types of multimedia that can be used within the available lesson items. Every lesson item has a unique set of features that establish when and why it is used in a lesson, and each lesson item appears differently in the lesson editing view so that you can easily identify it.

<i>Available Lesson Items</i>		
	Scene	A Scene is a section of a video file, which is typically used to provide interactivity for use-of-force lessons and courseware style multimedia presentations. Scenes provide interactivity using Scene Events.
	Slide	A Slide is a static (unchanging) presentation of text, audio and /or images, typically used for conveying a message or information to the student or audience. Slides are non-interactive by nature.
	Question	A Question is essentially a slide with the added ability to collect answers from students. Questions provide interactivity using Branching Rules.
	Video	A Video allows you to play a video file from start to finish without setting the Start and End points as you do with a Scene.

To add lesson items to the lesson, you can use the Add button on the main toolbar or any of the buttons on the Lesson editing view toolbar.



Lesson Editing View Dynamic Toolbar

<i>Lesson Editing Toolbar</i>		
	Zoom In / Out	These buttons allow you to zoom in and out on the lesson editing view.
	Auto Layout	Click to realign all the lesson items in the lesson editing view. The ideal alignment will be different for each lesson. It may require adjustment of the max number of auto-layout columns setting and the auto-layout resize settings in the Course Designer options screen.
	New Placeholder	Click this button then Click-Hold-Drag on the Lesson editing view to create a new Placeholder lesson item.
	New Linked Item	Click this button to Browse & Select a stand-alone lesson item file then Click-Hold-Drag on the Lesson editing view to create a new Placeholder lesson item.
	New Slide	Click this button then Click-Hold-Drag on the Lesson editing view to create a new Slide lesson item.
	New Question	Click this button then Click-Hold-Drag on the Lesson editing view to create a new Question lesson item.
	New Video	Click this button then Click-Hold-Drag on the Lesson editing view to create a new Video lesson item. After which you must double click the video lesson item to select a video file, or use the properties dock setting.
	New Scene	Click this button then Click-Hold-Drag on the Lesson editing view to create a new Scene lesson item. The system will automatically prompt you to select a video file and set the timeline (Start and End points) for the scene.

The rest of the chapter describes the lesson items (slide, scene, video and question) used to create lessons and the supplemental items that help you in making lessons more efficiently (linked items, placeholders, templates).

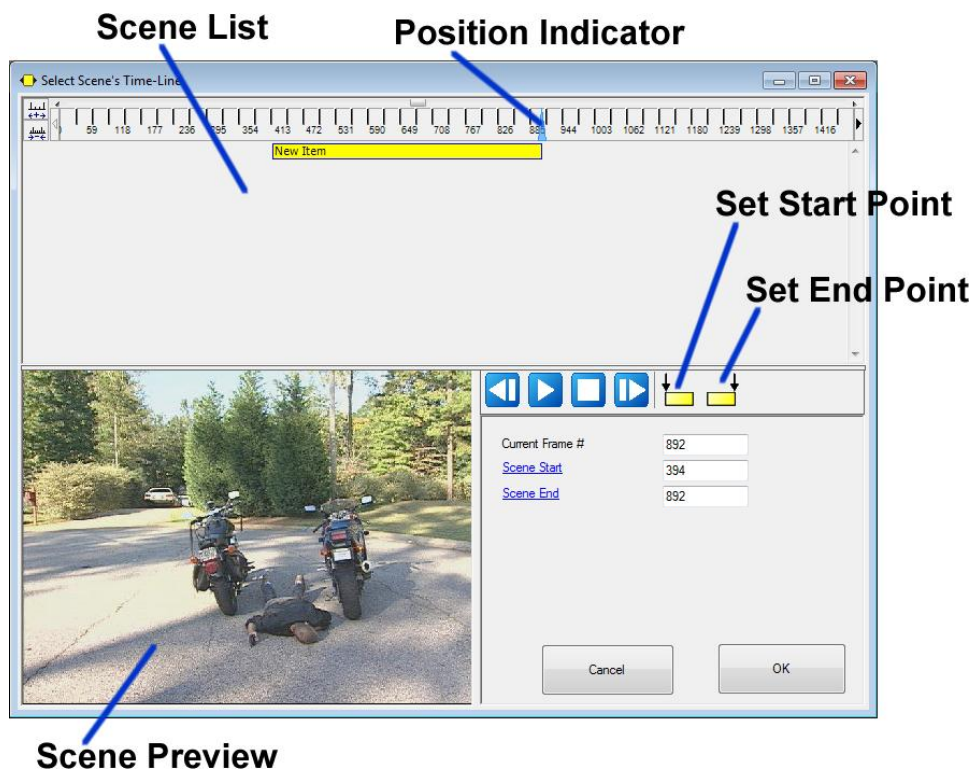
Scene Lesson Item

Scenes are the most important lesson items to understand for interactive use-of-force training. A scene, which is a clip or section of a larger video file, is used when high-speed branching or interactive branching is needed during a lesson. Scenes can also be used for real-time decision-making responses from a classroom or to inject other factors and stimuli into the lesson. In order to create interactivity with a scene, you must define the actions the system should perform. To define these criteria and the actions, you use Scene Events. Any number of scene events can exist in a scene.

You can create a new Scene by selecting the Scene button on the Lesson Editing View Dynamic Toolbar. Then, Click-Hold-Drag on the lesson editing view to define the location where the scene will be created.

Scenes in Lesson Editing View

When you create a new scene in a lesson, you will be prompted to select the video file to use. Afterwards, you will be prompted to set the timeline for the scene. The timeline is the start and end point, within the larger video file, for the scene. Scenes can start anywhere within the video file you are using and typically end at the last point at which the trainee or students could react to the content of that scene.

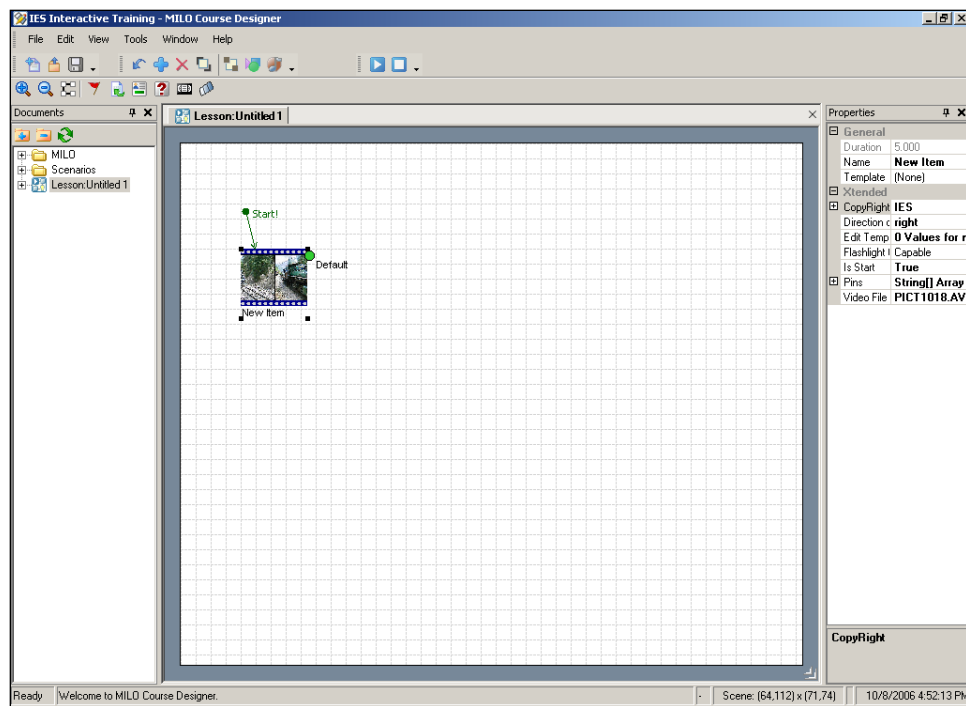


Scene Timeline Window

Set the start point for the scene by Click-Hold-Dragging the position indicator to the frame you wish and clicking the Set Start Point button). Set the end point for the scene by Click-Hold-Dragging the position indicator to the last frame you wish and clicking the Set End Point button. There are several shortcuts available in this screen as well:

- Left or Right Clicking on one of the other scenes in the Scene List will move the position indicator to the start or end (respectively) of the clicked scene.
- Clicking the Scene Start or Scene End hyperlinks will take you to the start or end of the current scene.
- You can also manually type frame numbers in the text boxes for Scene Start and Scene End.

Once you have set the timeline for the scene it appears in the lesson editing view.



Scene in Lesson Editing View

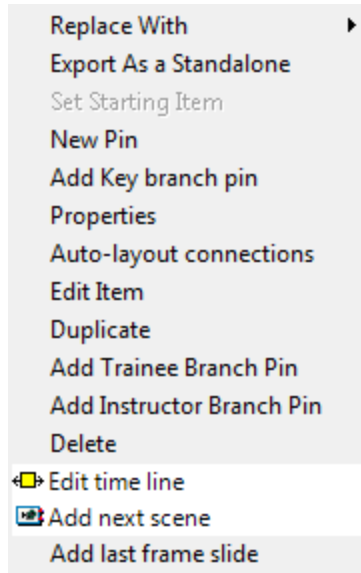
Scene Properties

The properties of a scene can be accessed using the properties dock. Below is a table summarizing the available properties for a scene.

- **Name:** This is the title of the scene. It is recommended to rename scenes based on the major action or purpose of the scene.
- **Duration:** Indicates the length of the scene. This property is not editable.
- **Template:** Indicates whether or not the scene is using a template and allows you browse and select a template to assign.
- **Copyright:** There are several fields collapsed here all pertaining to Copyright information for the video used within the scene. It is not necessary to set these unless you are distributing copyrighted material.
- **Direction of Pins:** Indicates the side of the lesson item in the lesson editing view which the pins will appear on. It is recommended to leave this set at "Right".
- **Edit Templated Content:** If a template is used for this scene, you can manually edit the text in the Named Shapes here. When clicking here, the Named Shapes editing screen appears.
- **Flashlight Capability:** Allows the editor to enforce how lowlight is used for this scene. It can be set to, Capable, Incapable or AlwaysUse.
- **Is Start:** Indicates whether or not this scene is the starting item in the lesson.
- **Video File:** Indicates the path and filename of the video used for the scene. You can browse to select a new video file using this property
- **Pins:** The Pins property is a collapsed list of the pins that exist on the Scene. You can use this property to rename pins quickly.

Scene Option Menu

There are several shortcut options you can perform on a scene from the lesson editing view, by right-clicking on the scene.



Scene Item Option Menu

- Replace With: Allows the user to select an alternate lesson item to replace the scene.
- Export as standalone: Save the scene as a standalone scene file. Most likely for use as a linked item in other lessons.
- Set Starting Item: Set the Scene to be the starting item for the lesson.
- New Pin: Add a new pin to the scene. This pin can have Hot Keys assigned to it.
- Add key branch pin: Add a new pin to the scene and assign Hot Keys to it.
- Properties: Refresh the scene properties in the properties dock.
- Auto-Layout Connections: Organize and align the connections from the scene's pins to other lesson items.
- Edit Item: Opens the scene editing view.
- Duplicate: Changes the cursor to a crosshair, allowing user to Click-Hold-Drag to define a new scene as a copy of the currently selected scene. Note: The pins are not copied to the duplicate scene
- Add Trainee Branch Pin: This shortcut will automatically create a pin which will be selectable in the scene editing view, for event branching. No Hotkey assignment is required or allowed when this options is used.
- Add Instructor Branch Pin: This shortcut will automatically create a pin which will be selectable in the branch options when the lesson is run. No Hotkey assignment is required or allowed when this options is used.
- Delete: Remove the scene from the lesson.
- Edit Timeline: Change the timespan (Start and End points) of the scene
- Add Next Scene: Add a new scene to the lesson. The newly added scene will use the same video file and start on the video frame after the end of the current one.
- Add last frame slide: Add a slide after this scene, with the last frame of video from the scene applied to the slide as the background. This feature is useful at the end of a scenario to allow the instructor time to watch how the trainee follows through with policy & procedure, based on their actions in the scenario, rather than just allowing the scenario to end by going straight to a black screen / debrief message.














Once you have created your new scene you can enter the Scene editing view by clicking "Edit Item" on the Option Menu or simply by double-clicking on the scene.







The scene editing view is designed for adding and editing events to allow interactivity. Events are used to define how the system should act or react at a given point within a scene. The illustration below indicates the key information that is available in the Scene Editing view. In this view, you can also access the Pins dock and Properties dock.



Scene Events

Scene events are used to tell the system when to do something and/or how it should react to when something does happen. Some scene events are used to define how the system reacts to the trainee or students doing something during the scene. Other events cause something to happen regardless of interaction from the trainees or students. The table below summarizes all the events available in the system.

Scene Events		
Shot		A shot event is used to define what the system should do when a use-of-force trainee uses a firearm during the scene.
OC		An OC event is used to define what the system should do when a use-of-force trainee uses an OC or Mace weapon during the scene.
Taser		A Taser event is used to define what the system should do when a use-of-force trainee uses a Taser weapon during the scene.
Baton		A Baton event is used to define what the system should do when a use-of-force trainee uses a Baton weapon during the scene.
BeanBag		A BeanBag event is used to define what the system should do when a use-of-force trainee uses a BeanBag weapon during the scene.
PepperBall		A PepperBall event is used to define what the system should do when a use-of-force trainee uses a PepperBall weapon during the scene.
Shot Gun		A Shotgun event is used to define what the system should do when a use-of-force trainee uses a Shotgun weapon during the scene. Note that Shotguns and Firearms can be separated into different weapon classes to allow different Hitzones for each weapon, but it is not required to do so.
37 mm		A 37mm event is used to define what the system should do when a use-of-force trainee uses a 37mm weapon during the scene.
Armor Piercing		An Armor Piercing event is used to define what the system should do when a use-of-force trainee uses an Armor Piercing weapon during the scene.
Sound Effect		A sound effect event is used to play a sound effect at a specific point within a scene. This is typically used to provide auditory stimulus to a use-of-force trainee.
Score		A score event is used to give a score at a specific point within a scene.
Information		An information event is used to update the text in a Named Shape of the template applied to a scene (if any).
Escalation		An escalation event is used to set the escalation level up or down for the current scene.

Decision		A decision event is used to collect real-time decision responses from trainees or students using keypads.
Threat		A threat event is used to define the time span within a scene when a threat exists. This also provides reaction time information to the trainer.
Weapon Fail		A weapon fail event is used to automatically disable (fail) all weapons of the selected type at a specific point in a video.
Multi Target Event		A multiple target event is similar to a Shot event, except that multiple hitzones are selected, along with the weapon type to react to, requiring multiple targets be hit to cause a reaction.
Shot Pause Event		A shot pause event is used as a “catch all” event which will pause the lesson if a shot is detected which is not caught by any other event.
Driving Simulator		A driving simulator message event is used only when the system is connected to a FAAC driving simulator. This event will allow you to send relevant messages to a driving simulator to start or stop training scenarios..

Creating Scene Events

To create a new scene event, set the Timeline Position Indicator to the point where you want the event to start, and then click the desired event on the Events Toolbar. The event will automatically be created and will end at the end of the scene.

Alternatively you can select an event from the Events menu. You will be prompted to select a Hitzone to use and a Pin to branch through, then the event will be created, stretching the entire scene.

To delete an event, select it in the list and press the delete key on the keyboard or Click the delete button on the main toolbar.

NOTE: Although multiple events can exist in a scene, the order in which they appear does set their priority. Anytime two events could be affected by a trainee’s action or are otherwise in conflict, the event that is higher in the events list will take precedence.

Event Properties

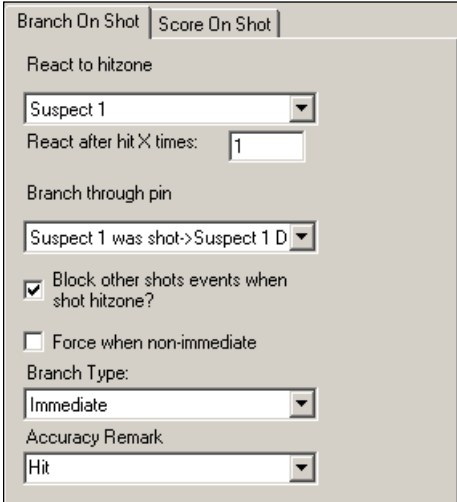
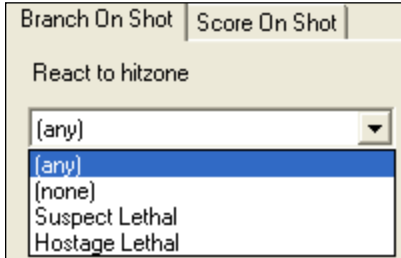
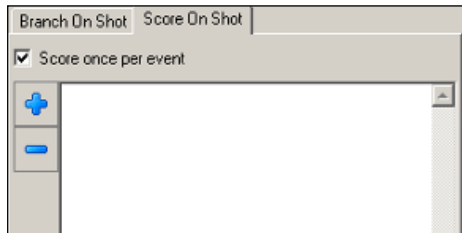
While in scene editing view, the properties dock displays the properties for the currently selected scene event, not the scene itself. The properties available for an event are the same regardless of which scene event is selected.

- Event Name: The name for the event. It will appear on the projected screen in Range, if it’s conditions are met.
- Event Position Method: Determines the method that the event uses to define its location inside of the time span of the scene. In most cases, the Stretch To End method is appropriate.
- Type of Event: Indicates the type of the event.
- Event Duration: Indicates the length of the event in seconds.
- Event Description: A description of the event. This property is optional and is not displayed anywhere else.
- Scene Copyright: Standard fields to enter the copyright information for the scene.
- Scene Duration: Indicates the length of the scene.

Laser Weapon Events

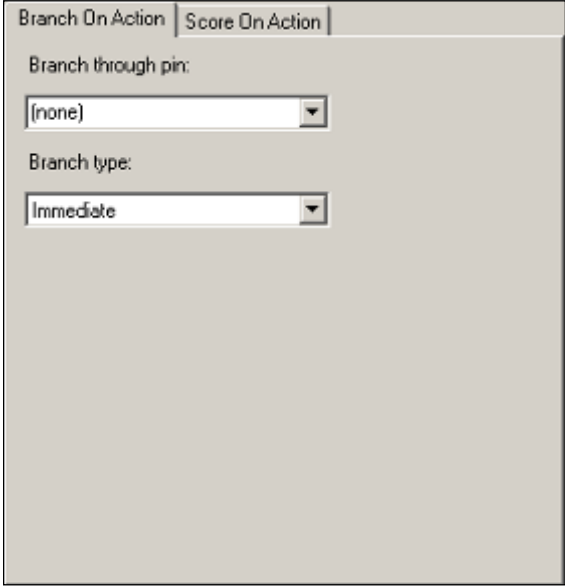
Laser based weapon events allow you define how the system will branch when a specific weapon type hits or misses a Hitzone. Laser weapon events are needed to cause system reactions for firearms, oc/mace, Taser, Beanbag, Pepper Ball, Shotgun, 37 and Armor Piercing weapon types.

Once the event is created in the event list, the Event Settings are shown. Laser based weapon events have several settings that determine how the system reacts to the laser weapon's use. Some of the settings are hidden by default and can be enabled in the MILO Course Designer options screen.

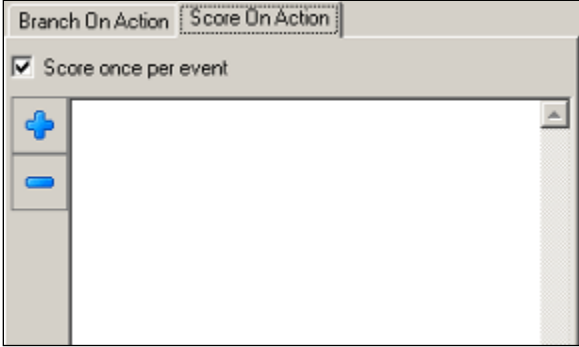
Laser Weapon Event Settings	
	<p>React To Hitzone: This setting determines which hitzone the event will react to. Selecting “none”, will cause a reaction if no hitzone was struck. Selecting “any” will cause the branch regardless of whether or not a hitzone was struck.</p>
	<p>Branch Through Pin: This setting determines which pin, on the scene, the system will branch through when the laser weapon is detected.</p>
	<p>React After Hit X Times: This setting determines the number of times the laser weapon must be used to cause a branch.</p>
	<p>Block Other Events: Prevents a single weapon hit from affecting multiple events of the same type.</p>
	<p>Force When Non-Immediate: Prevents other events which may be triggered after this event is triggered from overriding the outcome for the scene. Checking this option will only have an effect when the Branch Type is set to something other than Immediate.</p>
	<p>Branch Type: This setting determines how the system branches when the event criteria are met. Usually this will be set to <i>Immediate</i>.</p>
	<p>Accuracy Remark: This setting is informational only. It is displayed in the debrief screen of MILO Range. Select from the available list or type a custom remark.</p>
	<p>In addition to branching when a weapon is used, events allow you to define scoring for weapon use. When you add a new score to the list (by clicking the add button) the system will prompt you to select the score category, score value, and whom to apply the score to. Once this is done the score is added to the list. If you want to prevent the system from applying the scores multiple times for multiple shots, check the “Score once per event” setting.</p>

Baton Event

The Baton event allows the system to branch when a Baton weapon is used. In MILO Range, Batons are not laser based weapons, rather a real baton is used by the trainee, and the instructor clicks a button to signal its use. Since the Baton is not laser weapon, there is no need to select Hitzones. The event settings for a Baton event are slightly simpler than a laser weapon event.

Baton Event Settings	
	<p>Branch Through Pin: This setting determines which pin, on the scene, the system will branch through when the instructor indicates the Baton usage.</p> <p>Branch Type: This setting determines how the system branches when the instructor signals the use of Baton. Usually this will be set to <i>Immediate</i>.</p>

Scoring for the Baton event is identical to the laser based weapon event scoring. When you add a new score to the list (by clicking the add button) the system will prompt you to select the score category, score value, and whom to apply the score to. Once this is done the score is added to the list. If you want to prevent the system from applying the scores multiple times for multiple shots, check the “Score once per event” setting.

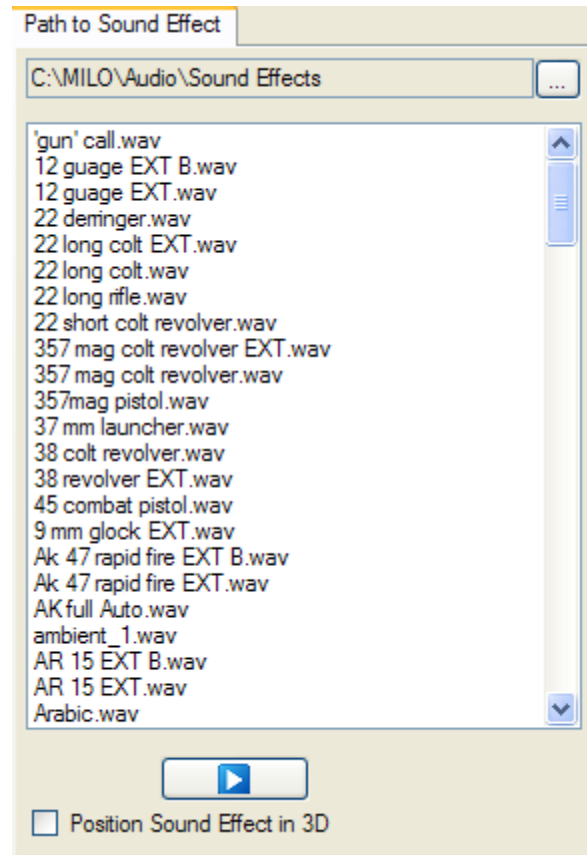


Weapon Event Scoring

Sound Effect Event

The sound effect event allows the instructor to select an audio file or sound effect that will play at a specific point within the scene. This can be especially useful if the video being used for the scene does not have appropriate sound effects already in it. For example, if you filmed a use-of-force lesson in which an on-screen subject fires a weapon (dry-fire), you can place a gun shot sound effect in the scene each time they pull the trigger.

Once you have created the sound effect event, the event settings allow you to browse and select the folder where the audio file you want to use is and to select the audio file from the list. The selection is automatically saved when you click it, and the length of the sound effect event is updated in the events list to reflect the length of the selected audio file.

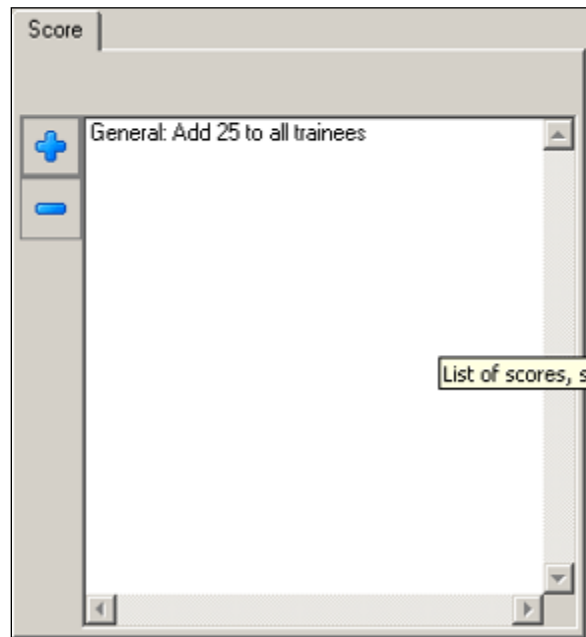


Sound Effect Event Settings

Score Event

The Score event allows the instructor to give a score in any score category to all participants in the training environment. The score is applied only once, at the Start point of the Score event. Notice that score events occur at the start point, which is indicated by the blue arrow. When creating a new score event the following steps are required for each score you wish to apply in the event:

1. Click the Add button
2. Select the score category
3. Enter a value for the score
4. Choose whether to add this value or make it the final score for that category

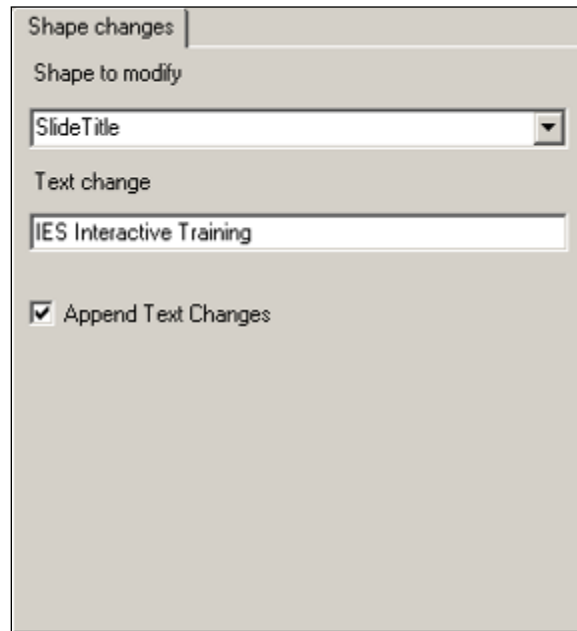


Score Event Settings

Information Event

The Information event is used to update or replace text in a Named Shape. Information events can only be used in scenes that are using a template. The Named Shape is updated according to the event settings at the Start point of the Information event.

In the Information event settings, you must select which Named Shape update to modify and type the text changes. The checkbox option to Append Text changes will allow you to add text to the Named Shape when checked. When unchecked, the event will clear and replace any existing text in the shape before applying the next text.

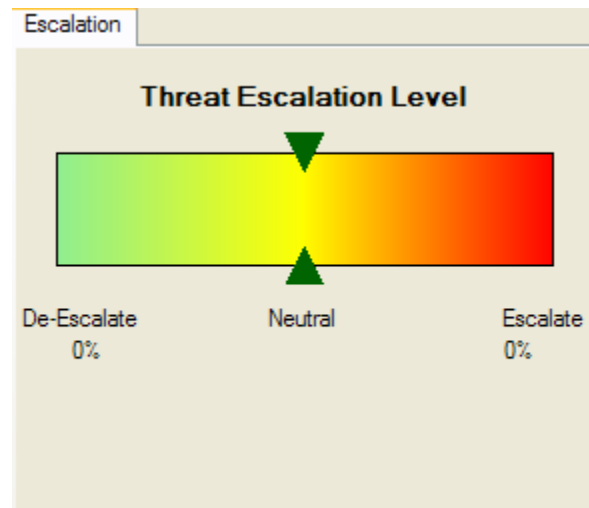


The screenshot shows a dialog box titled "Shape changes" with a tabbed interface. The "Shape to modify" section contains a dropdown menu with "SlideTitle" selected. The "Text change" section contains a text input field with "IES Interactive Training" entered. Below these fields is a checkbox labeled "Append Text Changes" which is checked.

Information Event Settings

Escalation Event

The Escalation event is used to raise or lower the escalation level during a scene. The escalation level is an indicator to the instructor of the maximum threat level within the scene. To change the escalation level using the escalation settings, Click-Hold-Drag the triangles to the green or red section of the escalation indicator to set the escalation down or up, respectively.



Escalation Event Settings

Threat Event

The threat event allows the instructor to define when a threat exists in a scene. The threat event only indicates to the instructor during the session whether or not a threat exists. Threat events can also be used to gauge reaction timing of a trainee based on the start point of the threat to the point at which the trainee reacted. Threat events do not have any settings other than its Start and End point.

Decision Event

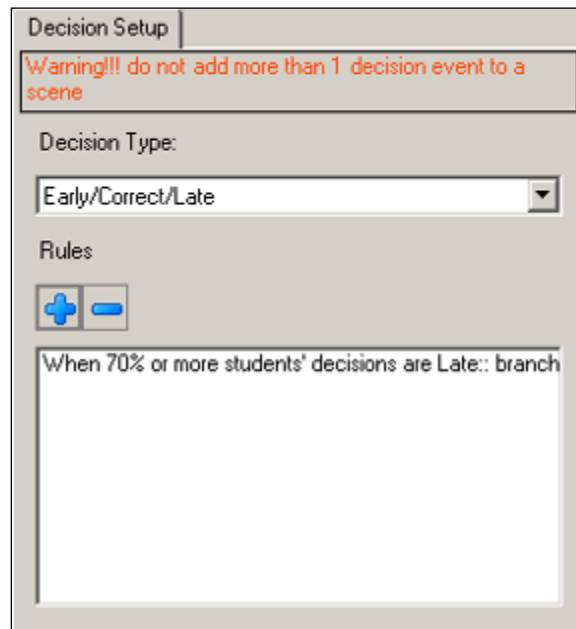
The decision event allows an instructor to define a time window within a scene where a reaction from a trainee or student is required and considered to be good judgment. For example, a Slide lesson item is presented to a class of students, stating that they should press their response key on their keypad when they feel that a supervisor has crossed the line of sexual harassment in the next scene. The instructor would then define the Decision event in the following scene to start when the supervisor began committing sexual harassment. The end of the decision event could be set to the end of the scene or could be some agency defined “Answer Window” amount of time after which a response is considered in correct or late.

NOTE: You can have only one Decision event in each scene.

When creating branching rules for a decision event, the following steps are required for each rule you create:

1. Click the Add button
2. Select the answer type to branch based upon
3. Select the Pin to branch through
4. Enter the percentage of responses whose answers are the type you selected in step 2

The new branch rules will be added to the Rules list.



Decision Event Settings

Scoring for a decision event is done using the same settings. To add a score based on a decision event the following steps are required:

1. Click the Add button
2. Select the answer type to score based upon
3. Select “No” when prompted to create a new branch rule
4. Select the score category
5. Enter the value for the score
6. Choose whether to add this value or make it the final score for that category

The new scoring rule will be added to the Rules list.

Fail Weapon Event

The fail weapon event allows an instructor to define a type of weapon and the point in time during a scene at which all of the weapons of the selected type will become disabled. The instructor will then have to enable the weapon again for it to become usable. For example, an instructor wants to see how a trainee might act in a given situation when their weapon fails. Rather than manually force failing the weapon during the lesson, they can pre-edit the weapon failure into the lesson by using this event. During the lesson, the weapon will work up until the point where the weapon fail event starts. Once the weapon fails it cannot interact with the session until it is re-enabled. When and if the trainee performs the appropriate malfunction drill, the instructor can re-enable the weapon for the trainee using the on-screen menu.

NOTE: There is no way to automatically re-enable a weapon once it has been failed. The weapon will remain “failed” for the rest of the lesson, unless the instructor re-enables it for them.

Pause on Shot Event

The shot pause event is used as a “catch all” event which will pause the lesson if a shot is detected which is not caught by any other event. This event reacts only to firearms weapons, not to OC, Taser or any other weapon type. This event is provided so that users do not have to create shot events for every possible point in time where a trainee may shoot. By using the pause on shot event, the lesson will simply pause if a shot is detected which does not trigger some other shot event.

NOTE: Pause on shot events will not be triggered if they overlap with other shot events. Therefore it is recommended that you set accurate In and Out points for your other shot events if you plan to use the pause on shot event.

Multi-Hitzone Weapon Events

As with other laser based weapon events, the multi-Hitzone weapon event allows you define how the system will branch when a certain collection of Hitzones or targets are hit. Once the event is created in the event list, the Event Settings are shown.

Event Settings – Branch Destination & Weapon Type	
<div><div>Branch Destination Weapon Type Hitzones Scores</div><div>Branch through pin <div>(none)</div></div><div><input checked="" type="checkbox"/> Block other shots events when shot hitzone? <input type="checkbox"/> Force when non-immediate</div><div>Branch Type: <div>Immediate</div></div><div>Accuracy Remark <div>Hit</div></div></div>	<p>Branch Through Pin: This setting determines which pin, on the scene, the system will branch through when the laser weapon is detected.</p> <p>Block Other Events: Prevents a single weapon hit from affecting multiple events of the same type.</p> <p>Force When Non-Immediate: Prevents other events which may be triggered after this event is triggered from overriding the outcome for the scene.</p> <p>Branch Type: This setting determines how the system branches when the event criteria are met. Usually this will be set to <i>Immediate</i>.</p> <p>Accuracy Remark: This setting is informational only. It is displayed in the debrief screen of MILO Range. Select from the available list or type a custom remark.</p>
Event Settings – Weapon Type	
<div><div>Branch Destination Weapon Type Hitzones Scores</div><div>Weapon Type</div><div><div>Gun</div><div>OC</div><div>Baton</div><div>Taser</div><div>Bean Bag</div><div>Pepper Ball</div><div>Shotgun</div></div></div>	<p>Select the weapon type which this event will react to. Only weapon type can be selected.</p>

Event Settings – Hitzones

Branch Destination | Weapon Type | **Hitzones** | Scores

☐ Should hit all selected to branch

- ☒ Target 2
- ☐ Target 1
- ☐ Suspect 1
- ☐ Right Side of Screen

Should hit all selected to branch: This setting determines if all of the selected hitzones are required to have a hit in order for the branch to occur.

Hitzone List: Just as with other single-target weapon events, here you must select which hitzones, from the available hitzones in this scene, will be required to be hit in order for the event to be triggered and the branch to occur.

In addition to branching when a weapon is used, events allow you to define how weapon use can be scored. As with most scoring options in MILO training applications, you can add scores for several categories here. When you add a new scoring line to the list (by clicking the add button) the system will prompt you to select the score category to use, the score value to apply, and whom to apply the score to (the entire group or just the trainee who used the weapon). Once this is done the scoring line is added to the list. If you wish to apply the score only once, check the “Score once per event” setting to prevent the system from applying the scores multiple times.

Branch On Shot | **Score On Shot**

☒ Score once per event

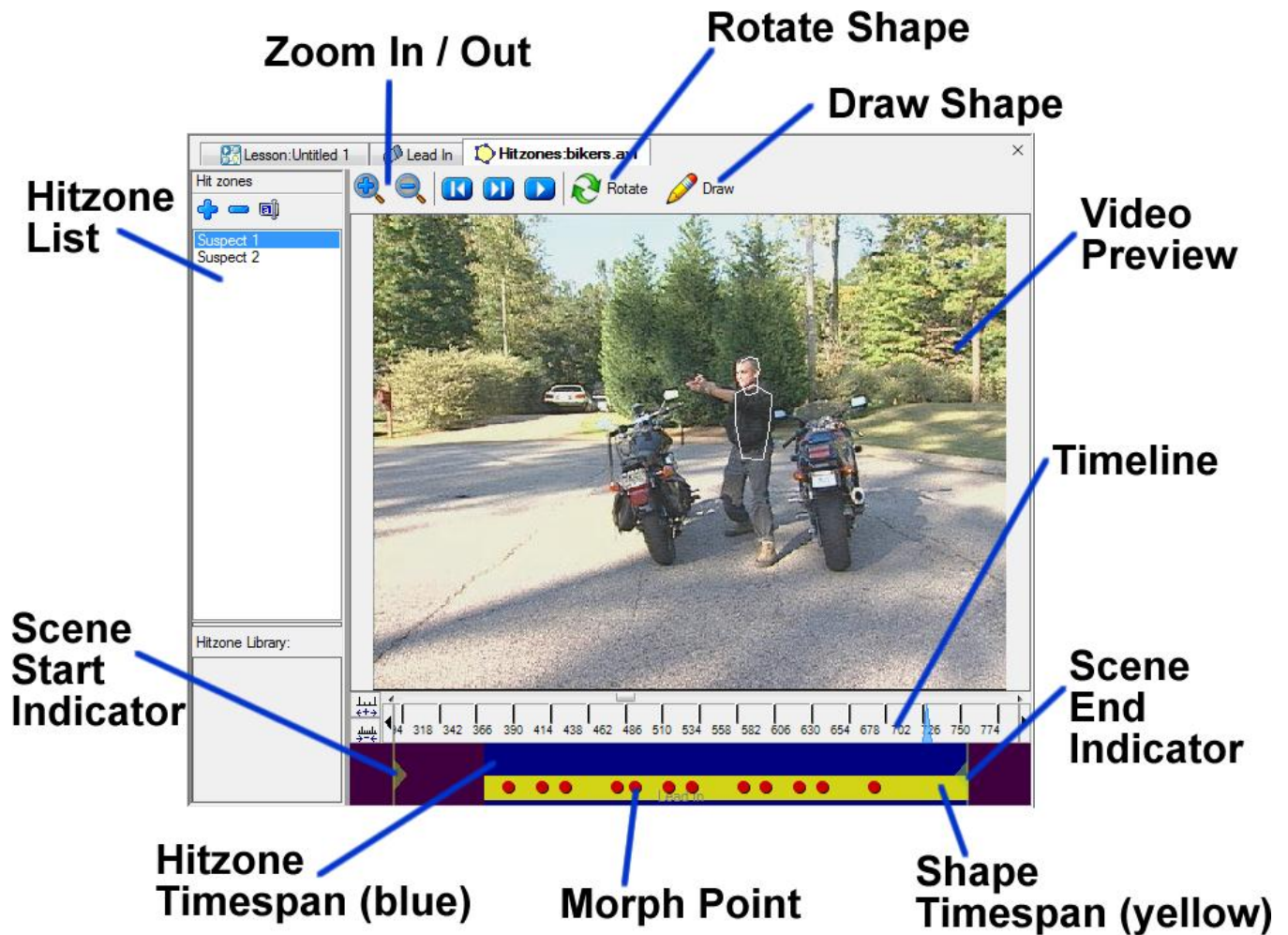
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-

Weapon Event Scoring

Hitzones

Hitzones are collections of shapes that define the area(s) on a target in the video, that will react to weapons and cause the scene to branch. A Hitzone is typically created to allow hits from a specific type of weapon. Therefore, when you create your Hitzone it is a good practice to name it for the type of weapon that will be used on it, and possibly the name of the stimulus it is covering as well. For example, for the first subject on screen that can be shot lethally with a firearm, you would create a Hitzone called "Subject 1 – Lethal" then draw the shapes that cover the lethal areas of that subject.

Hitzones are not an integral part of the lesson file. Hitzones are stored in the VideoExt file (video properties file) of the video used by the scene. Additionally, should you wish to make different versions of a video (with different branching for example) you can import Hitzones from the original video file by using the "Copy Hitzones From" function on the Edit menu while in the Hitzone editing view.



Hitzone Editing View

Creating Hitzones

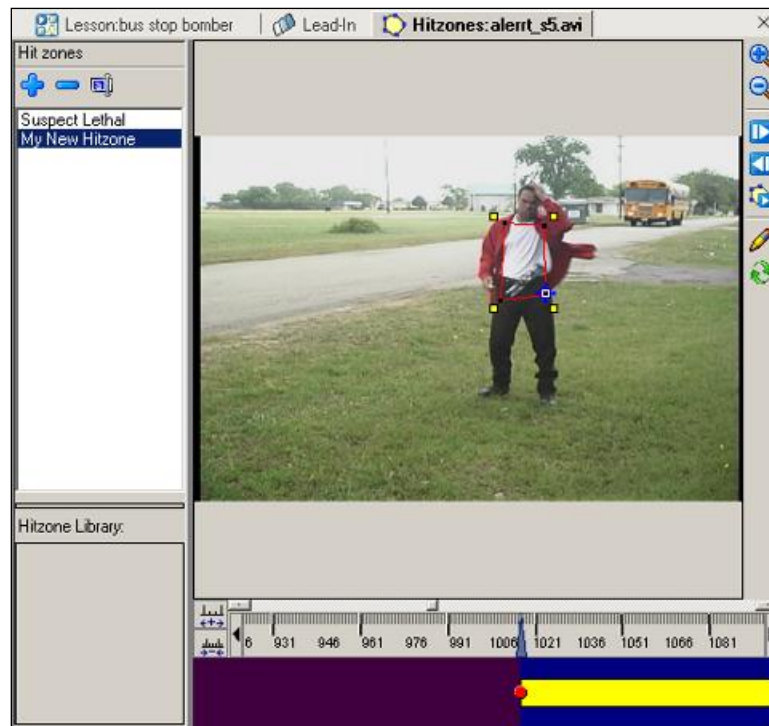
To create a Hitzone, click the Add button in the Hitzone list and enter the name for the new Hitzone. The Hitzone is added to the list, but it will not contain any shapes yet.

Draw Hitzone Shape

You are now ready to define the shape(s) that will make up the Hitzone. Scroll on the timeline to the video frame where you want to start your new Hitzone. If you wish to use a Hitzone from the Hitzone Library you can Drag-and-Drop it from the library onto the Video Preview. Otherwise, Click the draw tool on the Hitzone

Toolbar. Now, click to define each point in the shape for your new Hitzone. Right-Click the last point you wish to define and it will automatically connect itself to the first point you created.

NOTE: It is highly recommended to keep your shapes as simple as possible. Remember that events react to Hitzones, which contain any number of shapes. So, if you want to cover a complex target, such as the entire torso and/or arms of a subject, and consider those shapes all to be in the same Hitzone, it will be easier to create several different shapes in the same Hitzone, and modify each shape individually, rather than to create a single, complex shape covering everything on the target. For example, you want to create a “Lethal” Hitzone that covers the center mass and the head of a subject. Once you add the Hitzone to the list, It will be easiest to then create 2 different shapes; one for the center mass and one for the head, then adjust the shapes individually.



New Hitzone Shape Created

Once a shape is defined the default time span is created for you below the timeline. The blue area represents the timespan of the entire Hitzone. The yellow area represents the timespan for the currently selected shape in the video preview window. Since Hitzones can have multiple shapes, it is possible that the blue area and the yellow area do not start and end at the same point when multiple shapes exist.

Adjusting New Hitzone Shapes

In addition to the timespan that is created, the first and last Morphing Points are created by default. Morphing points represent the locations (in time) where the shape changes. Morphing is key to having accurate Hitzones. The system will automatically morph the shape between each morphing point. To make sure that a Hitzone shape always follows a subject on screen, you must create enough Morphing points that the system can automatically morph between them, keeping the shape on the subject. By default the first Morphing point is accurate since it was created when you drew the shape. However, chances are that the last morphing point is inaccurate, as it is a copy of the first point, and more than likely, the subject is not in the same place at the point in the he last Morphing Point exists.

Scroll on the timeline to the last Morphing point. Click-Hold-Drag the morphing point to the last possible video frame where a trainee could interact with the subject, then release the mouse. Note that the position you place this final morphing point should not be farther than the Scene End Indicator. Make sure the shape timespan

ends where the Morphing point ends. If it does not, hover over the end of the yellow time span to get the 2-arrow left and right cursor then Click-Hold-Drag the end of the timespan back to the frame where the last Morphing point exists.

Now, click on the last morphing point and adjust the black points (Click-Hold-Drag) in the shape to accurately cover the appropriate parts of the target.

Create Additional Morphing Points.

To create accurate Hitzones, we repeatedly define and adjust new Morphing Points half-way between the existing Morphing points, until the target is adequately covered by the shape at all times. On the timeline, Click approximately half-way between the two exiting Morphing points and adjust the shape to accurately cover the appropriate parts of the target. Notice a new morphing point is automatically created. This will happen every time you adjust the shape at a new point in the timeline. Repeat this process between all morphing points until the shape accurately covers the subject.

You can now add additional shapes to the Hitzone by selecting the Draw tool from the Hitzone toolbar. You can also add additional Hitzones, or save and close the Hitzone editing view.

Move / Copy Shape

You can move or copy a shape from one Hitzone to another. Right-Click on the shape and choose the function you want. You will be prompted to select which Hitzone to move or copy the shape to, or enter a new Hitzone name to be created with this shape placed in it.

Delete Shape

You can delete any shape from a Hitzone. Right-click on the shape and choose delete, then confirm to delete.

Duplicating Hitzones

Some videos may have multiple scenes where a target or on-screen actor's performance occurs identically, more than once. In this case, you can duplicate a hitzone and move it in the timeline to the recurrence of the target. Right-click on any hitzone in the Hitzones List and select Duplicate. Enter a name for the new hitzone. It will be added to the Hitzones List. Then Click-Hold-Drag the blue area of the hitzone in the timeline. Notice in the status bar that the start frame and new start frame are indicated. When you release the mouse, the hitzone will be relocated to the new start frame. You can perform the same time-shift function on an individual shape or polygon within the hitzone as well.

Hitzone Library

The Hitzone library allows you to save and recall common shapes used when creating Hitzones.

You can save shapes you have created to the Library. Right-click on any shape in any Hitzone and choose "Add shape to Library".

You can use shapes from the Hitzone library. Click-Hold-Drag a shape from the library onto the video preview to add it to the currently selected Hitzone.

Scenes with Templates

Scenes and templates work well together because of the functionality of Information events. When a template (discussed later in this chapter) is applied to a scene, Information events can be used to update the content of the Named Shapes on the template. This allows users to create dynamic, presentation-style video lessons without the need for expensive video editing hardware.

Below is an example of a scene with a template applied to it. The view is as it would be seen by the trainee in the MILO Range or MILO Classroom.



Template Example

Slide Lesson Item

Slide lesson items provide a simple and effective way to communicate important information to a trainee, student or audience. A slide is a static view of images, slides or text. Additionally, you can add audio to a slide. It is important to understand that Slides are not interactive lesson items. This means that they do not accept trainee or student input from lasers or keypads. However, as with any lesson item, instructor controlled branching can be assigned to Slides.

You can create a new Slide by selecting the Slide button on the Lesson Editing View Dynamic Toolbar. Then, Click-Hold-Drag on the lesson editing view to define the location where the Slide will be created.

Slides in Lesson Editing View

When you create a new slide lesson item in a lesson, a thumbnail preview of the slide will automatically be drawn for you. Initially this will be black, since no text or images exist in the slide yet.

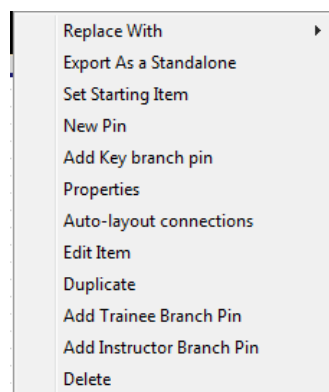
Slide Properties

The properties of a slide lesson item can be accessed using the properties dock. Below is a table summarizing the available properties for a slide lesson item.

- Name: This is the title of the scene. It is recommended to rename scenes based on the major action or purpose of the scene.
- Duration: Indicates the length of the scene. This property is not editable.
- Template: Indicates whether or not the scene is using a template and allows you browse and select a template to assign.
- Copyright: There are several fields collapsed here all pertaining to Copyright information for the video used within the scene. It is not necessary to set these unless you are distributing copyrighted material.
- Direction of Pins: Indicates the side of the lesson item in the lesson editing view which the pins will appear on. It is recommended to leave this set at “Right”.
- Is Start: Indicates whether or not this slide is the starting item in the lesson.
- Pins: The Pins property is a collapsed list of the pins that exist on the Scene. You can use this property to rename pins quickly.
- Soundtrack: The Soundtrack and its sub-settings allow you to add an audio file to play during the slide. The sub-settings of Soundtrack allow you to control how the audio is played and how the slide will branch if the audio is longer or shorter than the slide’s duration.

Slide Option Menu

There are several shortcut options you can perform on a slide from the lesson editing view.



Slide Lesson Item Option Menu

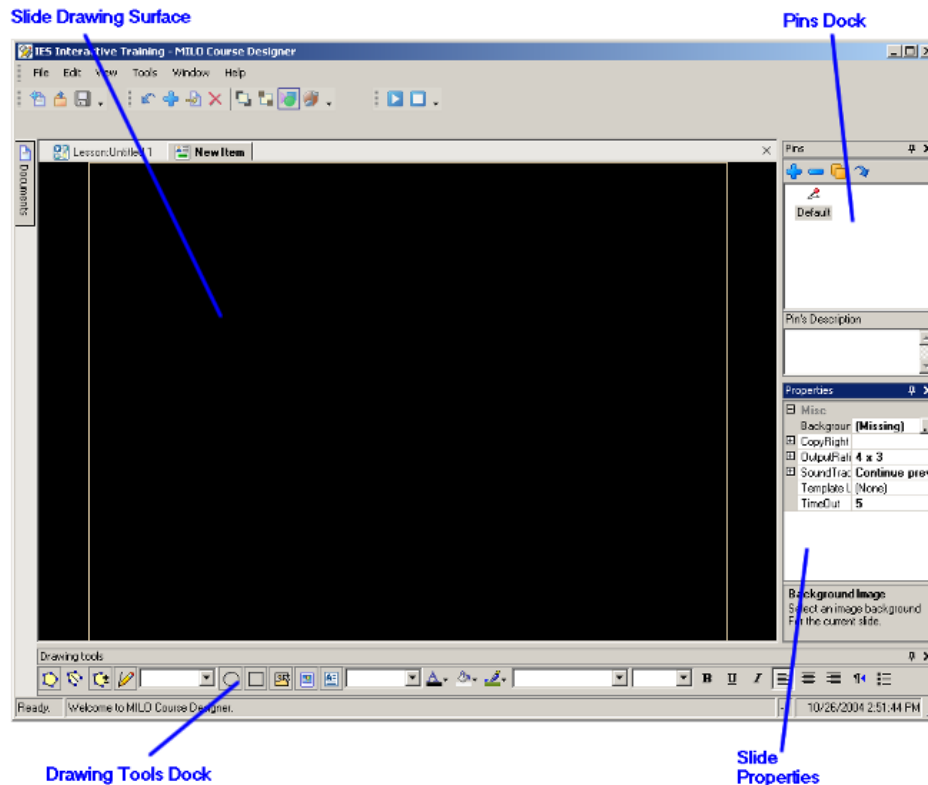
- Replace With: Allows the user to select an alternate lesson item to replace the slide.

- Export as standalone: Save the slide as a standalone file. Most likely for use as a linked item in other lessons.
- Set Starting Item: Set the slide to be the starting item for the lesson.
- New Pin: Add a new pin to the slide. This pin can have Hot Keys assigned to it.
- Add key branch pin: Add a new pin to the slide and assign Hot Keys to it.
- Properties: Refresh the slide properties in the properties dock.
- Auto-Layout Connections: Organize and align the connections from the slide's pins to other lesson items.
- Edit Item: Opens the slide editing view.
- Duplicate: Changes the cursor to a crosshair, allowing user to Click-Hold-Drag to define a new slide as a copy of the currently selected slide. Note: The pins are not copied to the duplicate slide.
- Add Trainee Branch Pin: Add a new pin to the slide.
- Add Instructor Branch Pin: Add a new pin to the slide.
- Delete: Remove the slide from the lesson.

Once you have created the slide, you can enter the slide editing view by clicking "Edit Item" on the Option Menu or simply by double-clicking on the slide.

Slide Editing View

The slide editing view is designed to allow the user to create text and image based slides used for presentations and training session messages. While in the slide editing view, you can also edit the Pins and their associated Hot Keys using the Pins dock. Once you have the Slide editing view open you can begin drawing the objects you want on your slide.



Slide Editing View

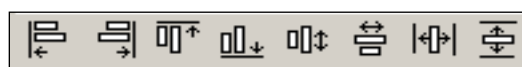
Slide Properties

While in the Slide editing view, most of the properties for the slide are similar to those available while viewing the slide's properties from lesson editing view. However, there are a few additional properties to be concerned with:

- Background: This setting is the image used as the background for the slide.
- Values At Shape: This is a summary of the number of Named Shapes that have been edited for the slide. Also, the user can edit the content of the Named Shapes using this link. When Clicking the link, the Named Shapes editing screen appears.
- Output Ratio: This setting defines the ratio of width to height for the slide.

Slide Editing Toolbar

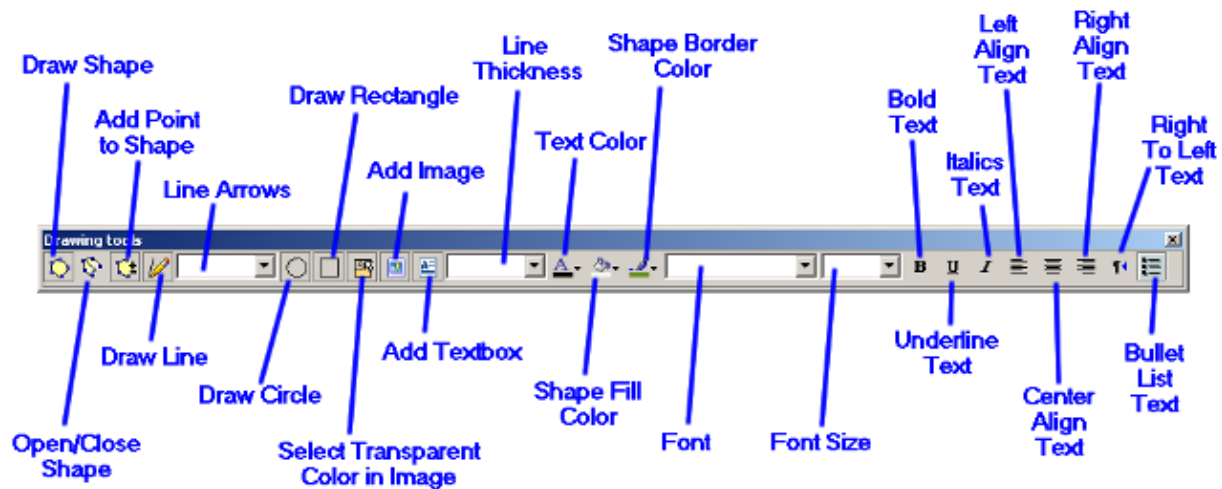
The slide editing toolbar contains buttons to allow you to adjust several items in the slide. Buttons for aligning specific edges and making items the same size are available. To select multiple items in a slide editing view, hold down the CTRL key on the keyboard and select the items you wish to perform alignment or size matching on.



Slide Editing Toolbar

Drawing Tools

While in Slide editing view, the Drawing Tools dock is added to the bottom of the Course Designer. There are multiple tools available for the user to draw shapes and add text and images to the slide. Refer to Chapter 3 for details on the functions available in the Drawing Tools.



Drawing Tools Dock

Hot Spots

In addition to setting pins and Hot Keys for branching options in slides, you can also set images, text boxes, shapes and polygons to cause branches, using Hot Spots.

Using the polygon drawing tool is the preferred method for defining Hot Spots. Draw the polygon then right-click on it, select "Hot Spot to pin", and select the pin you wish to branch through when the item is clicked. Right-click on any one of the polygon points and select the "Hide on Run Time" setting. This will give the polygon a semi-transparent blue overlay so that you can easily see it in the slide editing view. However the overlay will not be visible when played back in Course Designer, OnStage, Classroom or Range.



You can also set images, text boxes and shapes to cause a branch when clicked. Once you create the item, Right-Click on it, select "Hot Spot to pin", and select the pin you wish to branch through when the item is clicked.

Slides with Templates

When creating a presentation where multiple slides will be used, or when creating slides used commonly for standard messages, you can use templates as a basis for a slide. By creating a template first with appropriate named shapes and backgrounds, you can create a theme across all of the Slide lesson items that use the template.

Below is an example of a slide, used as a message to a trainee after shooting a suspect. The slide is using a template with user defined Named Shapes titled “Agency” and “Message”. The template used was created for the purposes of making slides for standard messages such as “You Used Lethal Force” or “You Were Assaulted”.



Standard Message Slide using Template

Question Lesson Item

Question lesson items provide a simple and effective way to test trainees, students and audience members on their knowledge of a subject. Questions are displayed in similar fashion to a Slide. This allows you to present questions using images, text and audio. To create the interactivity for Questions, we use Branching Rules which define how the system should branch based on the criteria about the answers received. As with all other lesson items, the instructor can also assign branching options using Hot Keys on Pins.

You can create a new Question by selecting the Question button on the Lesson Editing View Dynamic Toolbar. Then, Click-Hold-Drag on the lesson editing view to define the location where the Question will be created.

Questions in Lesson Editing View

When creating new question lesson items, a thumbnail with a Question icon is automatically drawn to represent the question in the lesson editing view.

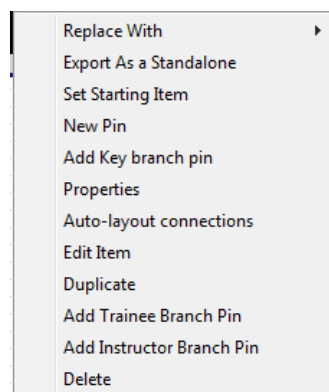
Question Properties

The properties of a question lesson item can be accessed using the properties dock. Below is a table summarizing the available properties for a question lesson item.

- Name: This is the title of the scene. It is recommended to rename scenes based on the major action or purpose of the scene.
- Answers: This is the collection of answers for this question.
- Question: This is the text of the question.
- Question Type: The type of question.
- Direction of Pins: Indicates the side of the lesson item in the lesson editing view which the pins will appear on. It is recommended to leave this set at "Right".
- Is Start: Indicates whether or not this slide is the starting item in the lesson.
- Pins: The Pins property is a collapsed list of the pins that exist on the Scene. You can use this property to rename pins quickly.
- Soundtrack: The Soundtrack and its sub-settings allow you to add an audio file to play during the slide. The sub-settings of Soundtrack allow you to control how the audio is played and how the slide will branch if the audio is longer or shorter than the slide's duration.

Question Option Menu

There are several shortcut options you can perform on a question from the lesson editing view.



Question Lesson Item Option Menu

- Replace With: Allows the user to select an alternate lesson item to replace the question.
- Export as standalone: Save the question as a standalone file. Most likely for use as a linked item in other lessons.
- Set Starting Item: Set the question to be the starting item for the lesson.

- New Pin: Add a new pin to the question. This pin can have Hot Keys assigned to it.
- Add key branch pin: Add a new pin to the question and assign Hot Keys to it.
- Properties: Refresh the question properties in the properties dock.
- Auto-Layout Connections: Organize and align the connections from the question's pins to other lesson items.
- Edit Item: Opens the question editing view.
- Duplicate: Changes the cursor to a crosshair, allowing user to Click-Hold-Drag to define a new question as a copy of the currently selected question. Note: The pins are not copied to the duplicate question.
- Add Trainee Branch Pin: Add a new pin to the question.
- Add Instructor Branch Pin: Add a new pin to the question.
- Delete: Remove the question from the lesson.

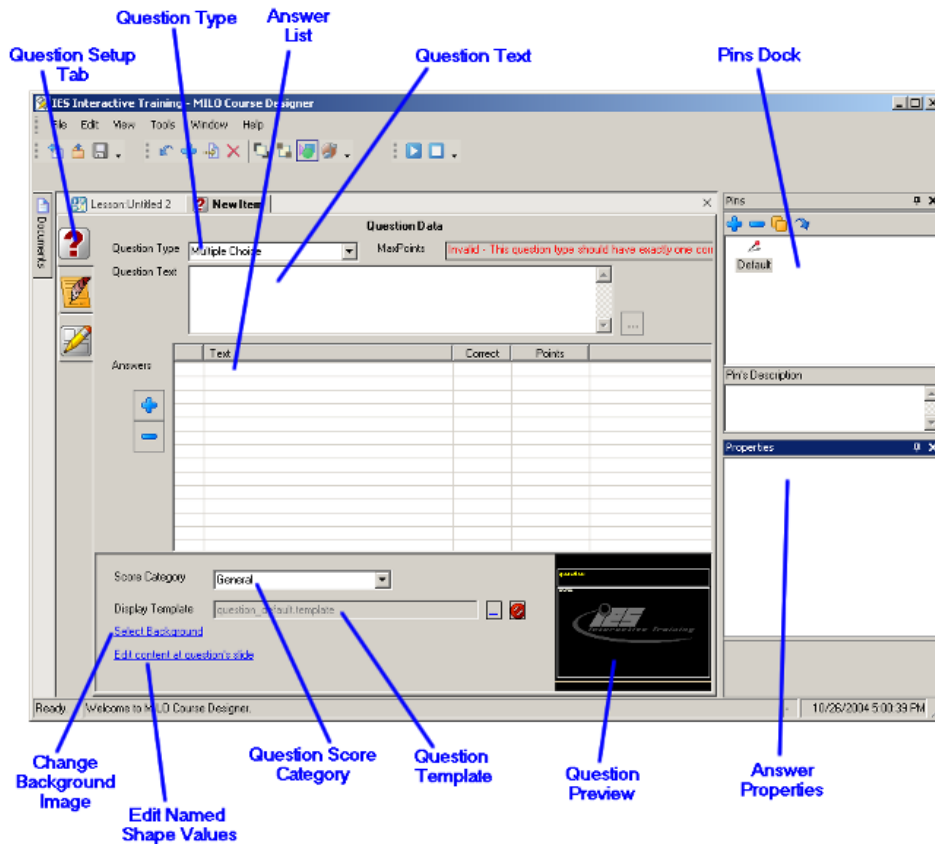
Once you have created the question, you can enter the question editing view by clicking "Edit Item" on the Option Menu or simply by double-clicking on the question.

Question Editing View

The question editing view is separated into three editing views: Question Setup, Branching Rules & Slide Editing. While in the question editing view, regardless of the tab selected, you can also edit the Pins and their associated Hot Keys using the Pins dock. Once you have the Question editing view open, begin by setting up the question.

Question Setup Tab

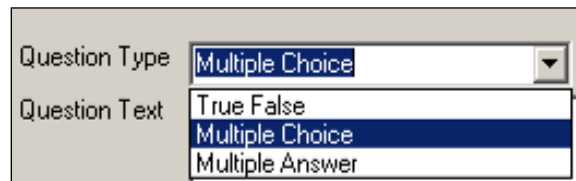
On the primary tab for the Question edit view; you create the key components of a question; the question type, the question text and the answers.



Question Editing View - Question Setup Tab

The first step in creating the question is selecting the question type. There are three types of questions available in the system.

1. Multiple Choice → A multiple choice question with one correct answer.
2. True/False → A True/False question with once correct answer.
3. Multiple Answer → A multiple choice question with multiple correct answers.



Question Type Selection

NOTE: Currently the standard keypads support only true/false questions and multiple-choice questions with up to 4 possible answers.

After selecting the question type, the next step is to enter the text of the question. You can type this text directly in the “Question Text” box or open the Question Text box screen by clicking the browse button to the right.

Question Text

While on this tab the properties displayed in the properties dock are for the answers to the current question. If no answers have been added, nothing will be displayed here. Once an answer is added and selected in the list its properties are displayed here.

Answer Properties

- **Correct:** This property is used to set whether or not the selected answer in the answer list is correct. When set to true the answer is considered correct.
- **Number:** This is the number of the answer. It is displayed on the question only for Multiple Choice Questions.
- **Points:** This is point value for the answer selected in the answers list.
- **Text:** This is the text of the answer. You can type directly in this box, or click the browse button to open a text-editing screen.

For multiple choice questions, Click the add button next to the answer list to create a new answer. Once it is added to the list, you can click on the answer and begin typing the text for the answer. When finished, press Enter to update the answer and the answer text will be updated. You can also use the “Text” property in the properties dock to enter the text of each answer by first selecting the answer then typing the text into the “Text” property in the properties dock.

Answers	Text	Correct	Points
1	My County police code allows me to search any v...		0
2	No. The individuals have given no indication of s...	Correct	0
3	Yes. I can search any car at any time.		0
4	Cannot be determined at this time.		0

Multiple Choice Answer List

Answers	Text	Correct	Points
1	False		0
2	True	Correct	25

True/False Answer List

NOTE: If the question is a True/False question, the answers are added to the answer list automatically. You will not be able to edit them.

To select which answer is the correct answer, Double-Click it. You can also select the answer in the answer list and set the “Correct” property in the properties grid to True.

You can set any point value for a correct answer. For incorrect answers, the user can set either no score or a negative score. Partial points for an incorrect answer are not possible during the editing of the question. However, in the Review screen of MILO Classroom Trainer and the Debrief screen of MILO Range, the instructor has the flexibility to add points should the students or trainees justify their answer.

Answers	Text	Correct	Points
1	My County police code allows me to search any v...		0
2	No. The individuals have given no indication of s...	Correct	25
3	Yes. I can search any car at any time.		0
4	Cannot be determined at this time.		-10

Multiple Choice Question with Scoring

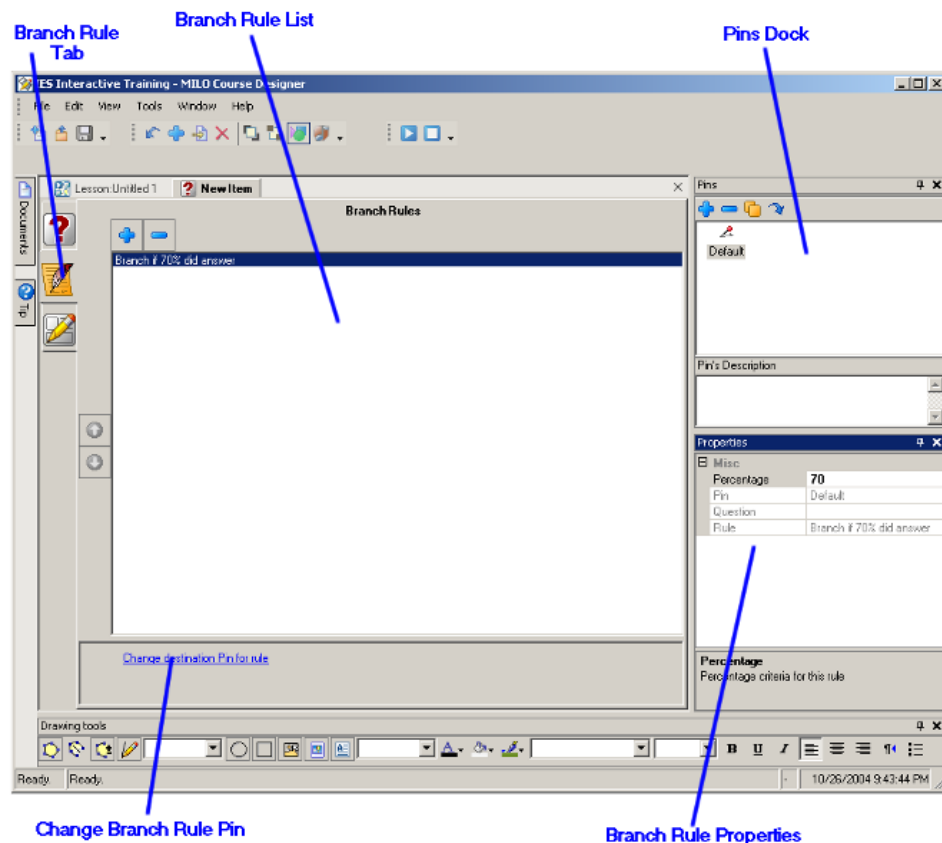
Additional settings to edit the question are available at the bottom of the question setup tab.

- **Background Image:** This property allows you to select a background image for the question. The image will only appear if the question's template has a "Background" Named Shape.
- **Edit named Shape Values:** If the template has Named Shapes that a user created themselves, or Named Shapes other than Question, Answer and Video; you can edit the content of those shapes using this link. When Clicking the link, the Named Shapes editing screen appears.
- **Score Category:** The score category used for the question.
- **Display Template:** This is Template used to display the question. You do not have to use a Template for questions, however, you must then manually create two Named Shapes on the Slide Editing Tab which use the "Question" and "Answer" names.

Branching Rules Tab

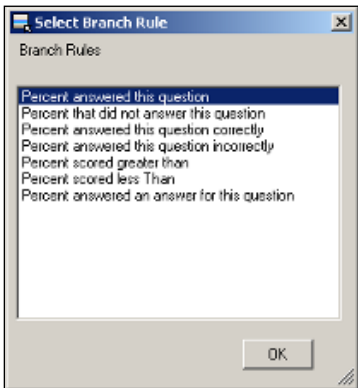
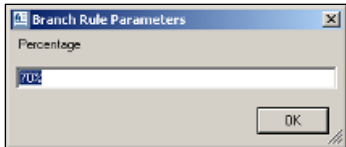
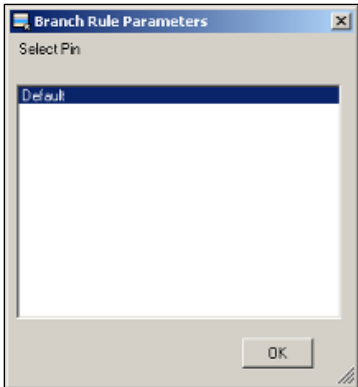
Branching Rules are used to create automatic system branching based on the answers received from the students. It is not required to create or use branching rules; they only add the ability to automatically branch based on answers received.

The list of branching rules is ordered and does imply priority. If two rules would both have their criteria met based on the answers from the students or trainees, the rule that is higher in the list will be the branching rule that is used when the lesson is run.



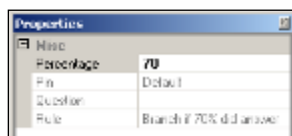
Question Editing View – Branch Rules Tab

To create a new branching rule, click the add button just above the rules list. The system will automatically prompt you to enter the information in the table below.

<i>Branch Rules</i>		
Response Criteria	 <p>The 'Select Branch Rule' dialog box shows a list of criteria: 'Percent answered this question', 'Percent that did not answer this question', 'Percent answered this question correctly', 'Percent answered this question incorrectly', 'Percent scored greater than', 'Percent scored less than', and 'Percent answered an answer for this question'. The 'OK' button is at the bottom right.</p>	This setting determines what type of response, or lack of, that the branch rule will be based upon.
Percent Trigger for Criteria	 <p>The 'Branch Rule Parameters' dialog box shows the 'Percentage' field set to '70%'. The 'OK' button is at the bottom right.</p>	This setting will determine at what percentage for the response criteria, of all the answer received, will trigger the branch.
Branch Pin	 <p>The 'Branch Rule Parameters' dialog box shows the 'Select Pin' dropdown menu with 'Default' selected. The 'OK' button is at the bottom right.</p>	This selection here determines which Pin the system will branch through if the rule is triggered.

To change the pin than an existing branching rule uses, click the “Change Destination Pin for rule” link at the bottom of the screen. The Pin selection screen will appear to allow you to select from the available pins on the question lesson item.

The properties grid, while on the Branch Rules tab displays the properties for the currently selected Branch rule. You can edit the percentage used to meet the response criteria for the branching rule here. All other settings cannot be edited here.



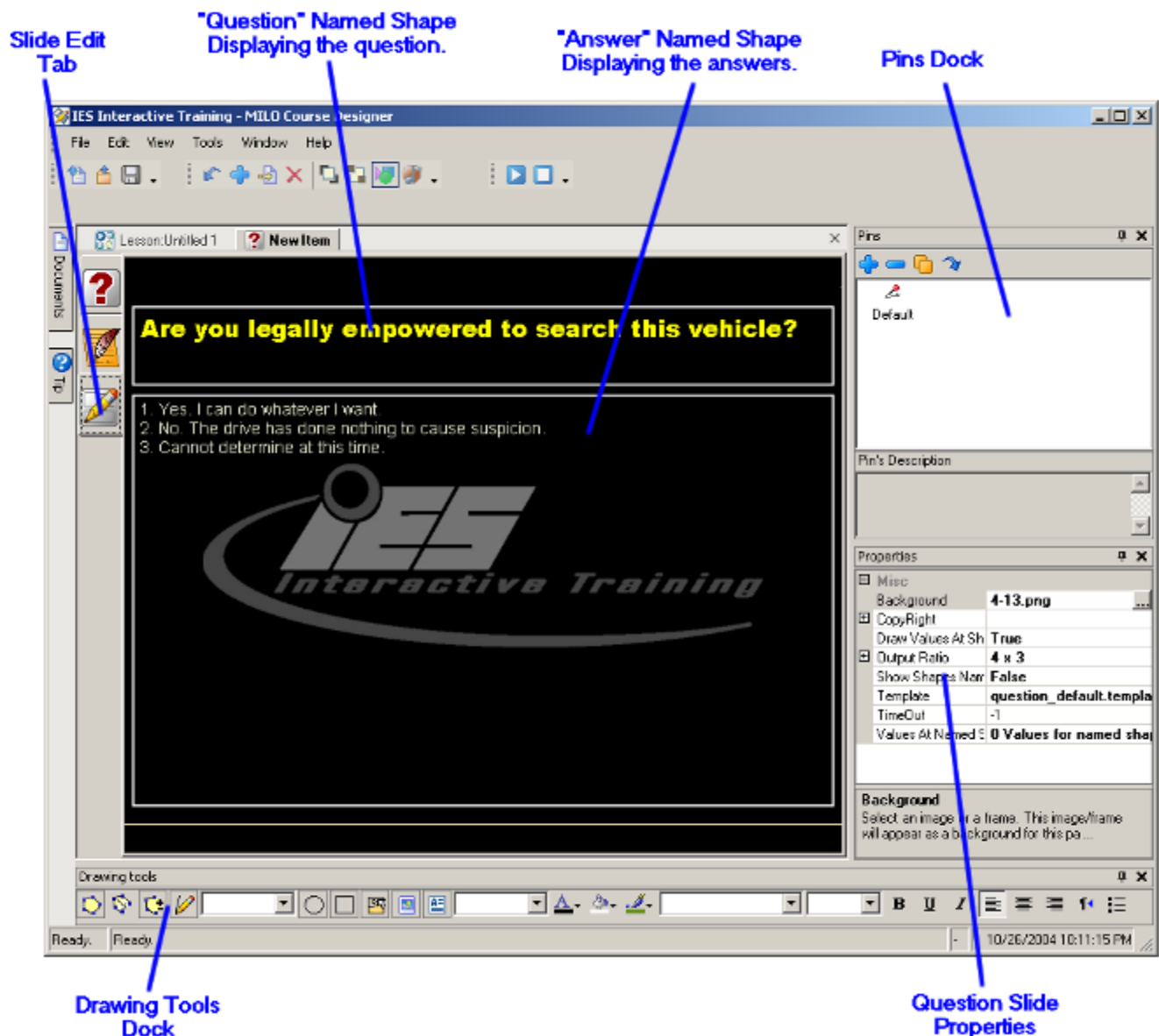
Branch Rule Properties

Slide Editing Tab

The question slide-editing tab provides a slide editing view to create the question's appearance. If the question is using a display template, you can edit the content of the Named Shapes and add other text and images to the question's slide. However, you cannot delete the text boxes, images or other Named Shapes that already exist on the template.

If the question is not using a display template, you must create two text boxes, one with the Named Shape set to "Question" and the other set to "Answers". If you do not do this, the question will not be displayed properly when the lesson is run.

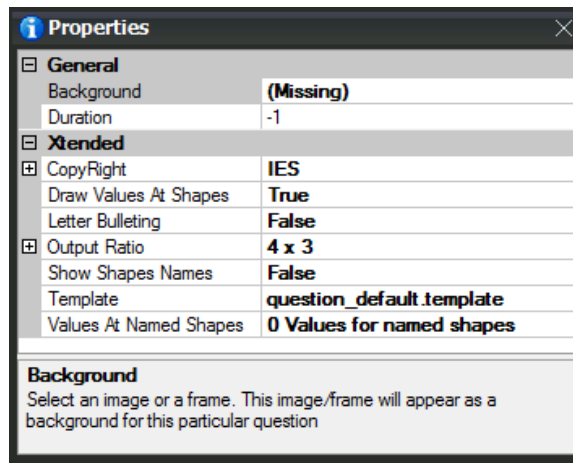
The functionality of the Drawing Tools are identical to that of the Slide editing view.



Question Editing View – Slide Editing Tab

Question Slide Properties

The properties displayed in the properties dock are similar to those in Slide editing view of Slide lesson items.



Question Slide Tab Properties

Background: This setting is the image used as the background for the slide. If a template is in use, the background image will not be visible.

Duration: Allows user to set the display time of the question. If set to “-1” the question will play indefinitely until a branch occurs or all students have answered.

Copyright: There are several fields collapsed here all pertaining to Copyright information for the video used within the scene. It is not necessary to set these unless you are distributing copyrighted material.

Draw Values At Shapes: This setting determines whether or not the question and answers are visible on the slide in the editing view. By default this is set to True.

Letter Bulleting: Sets the bulleting in the slide to either Letters or numbers.

Output Ratio: This setting defines the ratio of width to height for the question’s slide

Show Shape Names: This setting determines whether or not a small label indicating the name for each Named Shape is visible on the slide in the editing view. By default this is set to False.

Template: Indicates whether or not the question is using a template. If a template is in use, the file name of the template is listed here.

Values At Named Shapes: This is a summary of the number of Named Shapes that have been edited for the slide. Also, the user can edit the content of the Named Shapes using this link. When Clicking the link, the Named Shapes editing screen appears.

Video Lesson Item

The video lesson item is provided as a simple lesson item to allow user to playback long, non-interactive video files. Courseware videos containing long segments of a “talking head” subject, introduction videos and other non-interactive videos should be added to lessons as Video lesson items rather than scenes. Video lesson items allow the user to select a video file to play from start to finish. It is not possible to set the In and Out points for a Video lesson item.

Since Videos do not react to trainees, the Video lesson item can have only one outcome and therefore needs only one pin. However, the instructor can setup a keystroke that will act as a Hot Key causing the Video lesson item to branch to the next lesson item.

Because of the non-interactive nature of the Video lesson item, they can utilize almost any type of video available on the system. You can create a new Video lesson item by selecting the Video button on the Lesson Editing View Dynamic Toolbar. Then, Click-Hold-Drag on the lesson editing view to define the location where the Video will be created.

From Lesson Editing View

When you create a new slide lesson item in a lesson, a thumbnail image representing the Video lesson item will automatically be added to the lesson view. Double-click the item to select a video file to use.

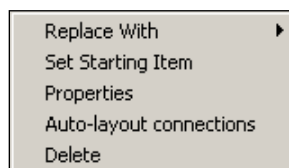
Video Properties

The properties of a Video lesson in the properties dock are:

- Duration: Indicates the length of the video file in seconds.
- Name: This is the title of the Video lesson item. It is recommended to name Video lesson items based on the message or information contained in them.
- Skip Key: This property is a drop-down menu that allows the user to select a key used to skip this video lesson item while it is playing.
- Template: Indicates whether or not the Video is using a template. If a template is in use, the file name of the template is listed here.
- Video File: This property displays the name of the video file used for the Video lesson item.
- Direction of Pins: Indicates the side of the lesson item in the lesson editing view which the pins will appear on. It is recommended to leave this set at Right.
- Edit Templated Content: If the template has Named Shapes that a user created themselves, or Named Shapes other than Question, Answer and Video, the user can edit the content of those shapes using this link. When Clicked, the Named Shapes screen appears.
- Is Start: Indicates whether or not this Video is the starting item in the lesson.
- Pins: The Pins property is a collapsed list of the pins that exist on the Video lesson item. You can use this property to rename pins quickly.

Video Option Menu

There are several shortcut options you can perform on a Video from the lesson editing view.



Video Lesson Item Option Menu

- Replace With: Allows the user to select an alternate lesson item to replace the Video.
- Set Starting Item: Set the Video to be the starting item for the lesson.
- Properties: Refresh the Video properties in the properties dock.

- Auto-Layout Connections: Organize and align the connections from the Video to other lesson items.
- Delete: Remove the Video from the lesson.

Once you have created your new Video lesson item and selected a video file, either by Double-Clicking the lesson item or using the appropriate properties dock setting, the Video lesson item is complete. There is no editing view for a Video lesson item and there are no further settings to manage.

NOTE: Double-Clicking on a Video lesson item in the lesson editing, after selecting the video file used for the lesson item, will open the MILO video playback settings screen. The playback settings screen is provided to allow advanced users to change the playback parameters for a video file in MILO software applications. Using this screen is not necessary for Video lesson items, and is not recommended without consulting IES technical support.

Linked Items

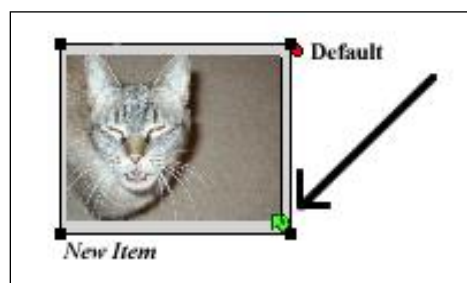
Linked items are a simple way to create consistency across all of the lessons you create in your system. For example, most lessons from IES have a slide that is displayed at the beginning with an IES logo and a sound effect. This is a linked item (slide) that is in each lesson that IES provides. However, this is in fact a single slide that is linked into all of these lessons.

A linked item can be any of the lesson items available on the system. To be able to use linked items, you must first create and save the lesson item as a standalone file. Then in each lesson that you want to use the item, you simply choose the Linked Item icon on the toolbar and select the file when prompted.

Should you want to update the linked item, keep in mind that doing so will affect all the lessons that are using it.

Additionally, should you need to customize a linked item for only one lesson; you can convert the linked item into an internal lesson item at any time by right-clicking and choosing "Switch Link to Content".

A Linked lesson item appears much the same way that the lesson item type it is based upon would appear, except that a small green arrow in the lower right hand corner is added to indicate that it is a linked item. Below, is an example of a linked slides lesson item.

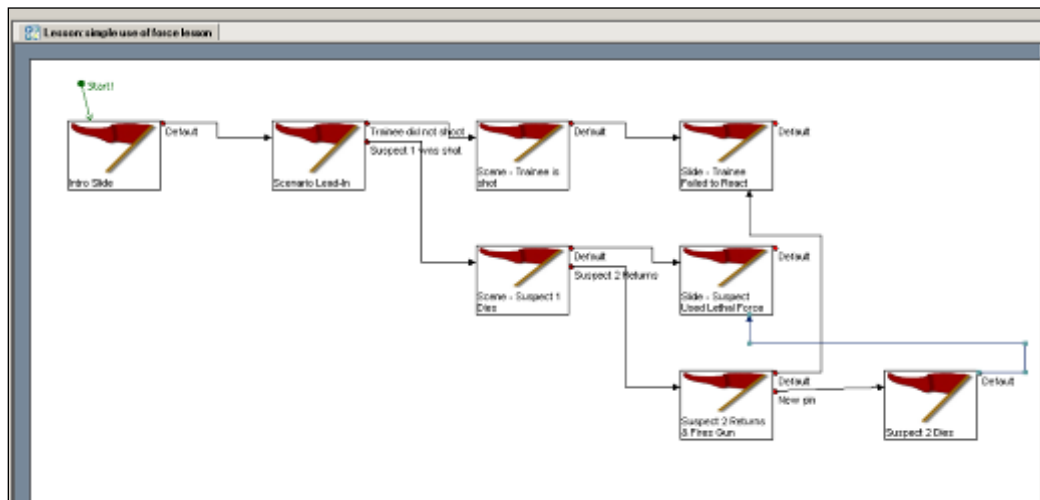


Slide Linked Item Thumbnail

Placeholders and Storyboards

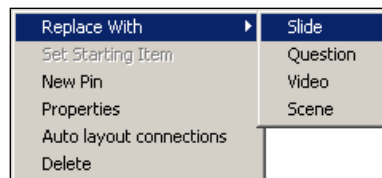
Placeholders provide an easy way to outline a lesson before the multimedia content that will make up the lesson is available. By using placeholders you can draw out the entire lesson with all of the names, pins and connections before any of the video, images or audio files used in the lesson items is available. This lesson, made up of placeholders, is referred to as a Storyboard.

Whenever creating a complex lesson it is a good practice to create your lessons first as a Storyboard. This is especially useful for Use-Of-Force training lessons that typically consist of several video scenes. By creating the storyboard first, you can print and use it as a filming guide. Below is a sample lesson created using placeholders.



Storyboard Example

Once you have filmed and captured the video and gathered the images and other multimedia items that are necessary for the lesson, you can quickly and easily replace each of the placeholders with the appropriate lesson item using the option menu. Right-click on the Placeholder lesson item and select the appropriate replacement lesson item from the Replace With menu. The system will then continue as if you had just created a new lesson item, prompting you to select a video for scenes or displaying the preview for slides, etc.

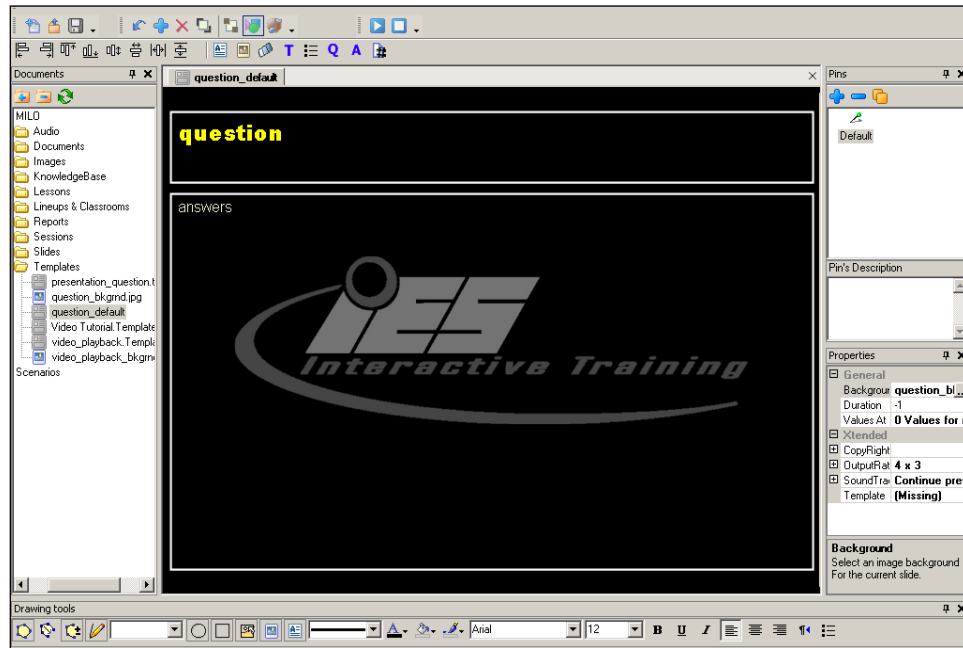


Placeholder Option Menu

Templates

Templates have a variety of uses in MILO training systems. Templates are an advanced topic appropriate for users who wish to invest additional preparation time in their lesson editing efforts to achieve consistency and efficiency for their curriculum. It is not necessary to use or understand how to create templates in order to edit lessons effectively.

Templates can be used to create multiple lesson items that have a similar layout and appearance. A template is not a lesson item itself, and cannot be played or directly added to a lesson; rather they are applied to any lesson item to control the way it is displayed.



Template Editing View



Template Toolbar

Templates are created and edited in the same fashion as a slide. The editing view is substantially similar to the Slide editing view, except for the additional buttons on the toolbar shown above. The key difference between slides and templates is the use of Named Shapes. These Named Shapes feature provides the ability to draw a text box or an image that can later be filled according to the lesson item that uses it.

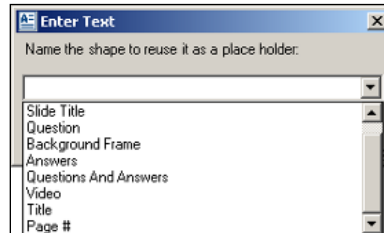
Named Shapes

The following list shows the default Named Shapes the system provides. They can be created by clicking the appropriate toolbar button and Click-Hold-Dragging on the editing view to define the shape. You can also manually create a text box or image and then selecting “Set Shape’s Name” from the option menu of that shape.

- **Question:** Use only when the template will be used on a question lesson item. When a “Question” Named Shape exists on a template, and that template is used on a question lesson item, the MILO system will display the text of the question lesson item within the Named Shape.
- **Answers:** Use only when the template will be used on a question lesson item. When an “Answers” Named Shape exists on a template, and that template is used on a question lesson item, the MILO system will display the text of the answers for a question lesson item within the Named Shape.

- Video: Use only when the template will be used on a scene or video lesson item. When applied to a scene or video lesson item, the playback of the video or scene will be inside the Video Named Shape, rather than displayed in full-screen mode.
- Slide Bullets, Title, Background, Presentation Title, Page Number: These Named Shapes are commonly used names for presentations. No predetermined information is displayed in these Named Shapes. The user must select an image, type the text or use Information events to populate them with data.

In addition, you can manually create a text box or image box and using the option menu, choose “Set Shape’s Name”. In this window you will see a drop-down list with the included Named Shapes. You may alternatively type your own names instead of selecting one from the list. This name will then show up when the template is used on a lesson item.



Select Shape’s Name Window

Details of templates and how they affect specific lesson items are explained in the preceding sections of this chapter.

CHAPTER 5 – Software Options

This chapter will describe the MILO Course Designer options screen.

NOTE: There is an Advanced Options button at the bottom of the Software Options screen. This button, and the resulting screens and setting should only be used under the direct guidance of IES Technical Support.

General Options

The General options in the Course Designer allow the user to set basic functionality options for the Course Designer. The image and table below summarize the functionality of the General options tab.

Options

General | Folders | Score Categories | Appearance | Scene Events

Pin options

☒ None Assign key for default pin

☐ Immediate branch

☐ Reset default pin

Copyright information

Company: Author: Default version number:

Slide settings

Default Output Ratio: Default duration:

☐ Enable application tips

☒ Enable documents dock

☐ Enable Pins dock

☐ Auto-connect dragged items

☐ Use reversible selection

☐ Always spell check when closing

☐ Use StoryBoard for new lessons

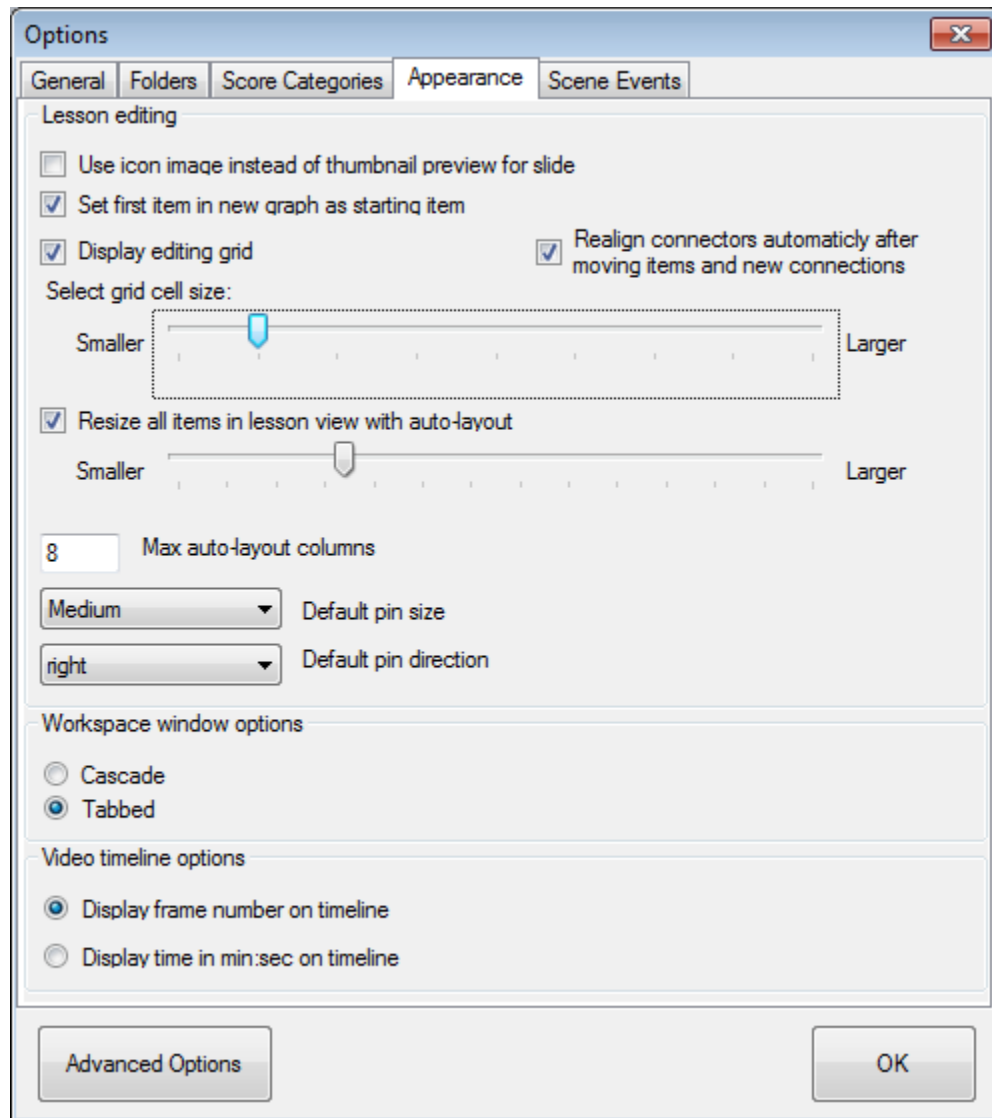
Default StoryBoard folder: ...

Default question template: ...

Default length for chronological scene

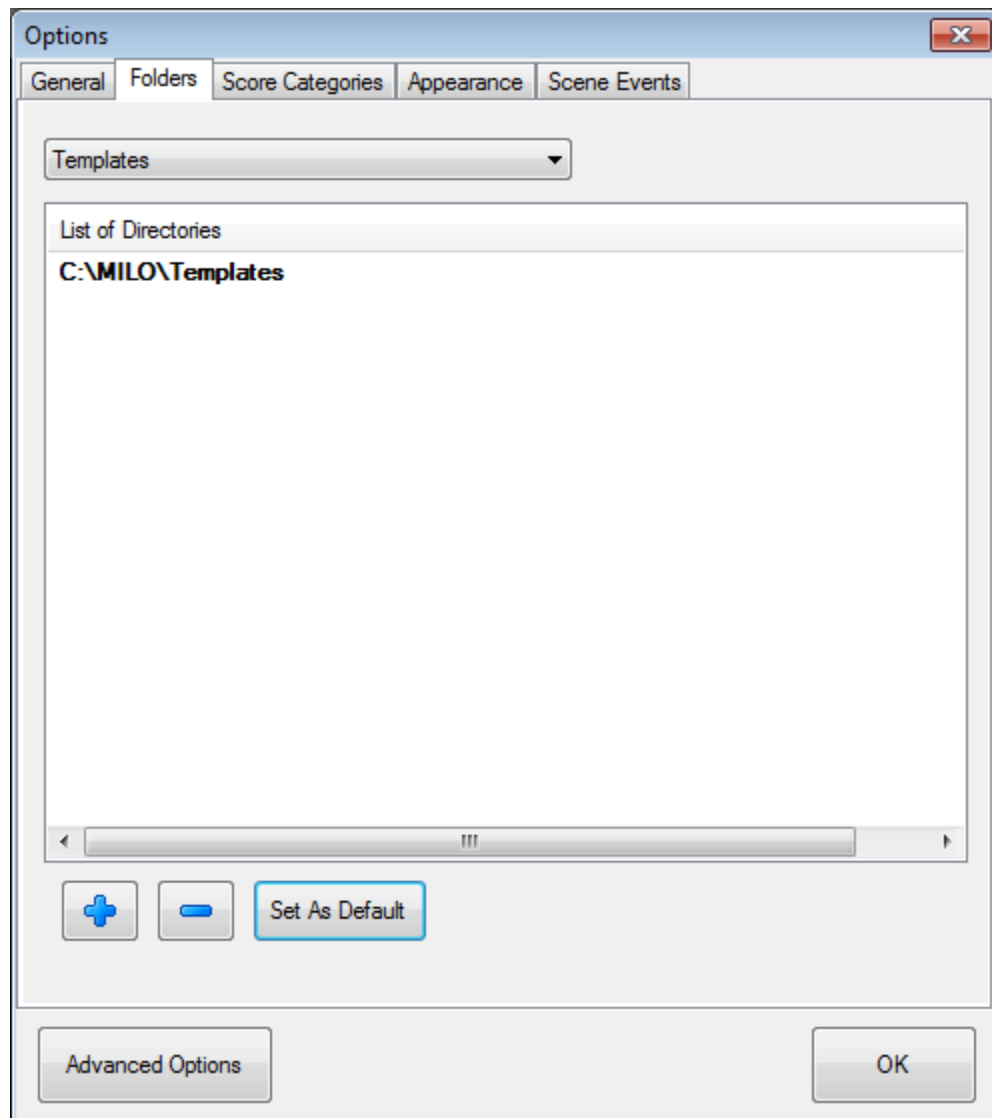
Appearance Options

The Appearance options in the Course Designer allow the user to set functionality options related to the layout and appearance of the lesson editing view. The image and table below summarize the functionality of the Appearance options tab.



Folder Options

The various types of files used throughout the MILO Course Designer and other applications can be located in several folders on your system. This screen allows you setup all the folders to search for files in. This is especially useful if you move files to new locations, as the system will automatically attempt to locate files for you. The image and table below summarize the functionality of this screen.

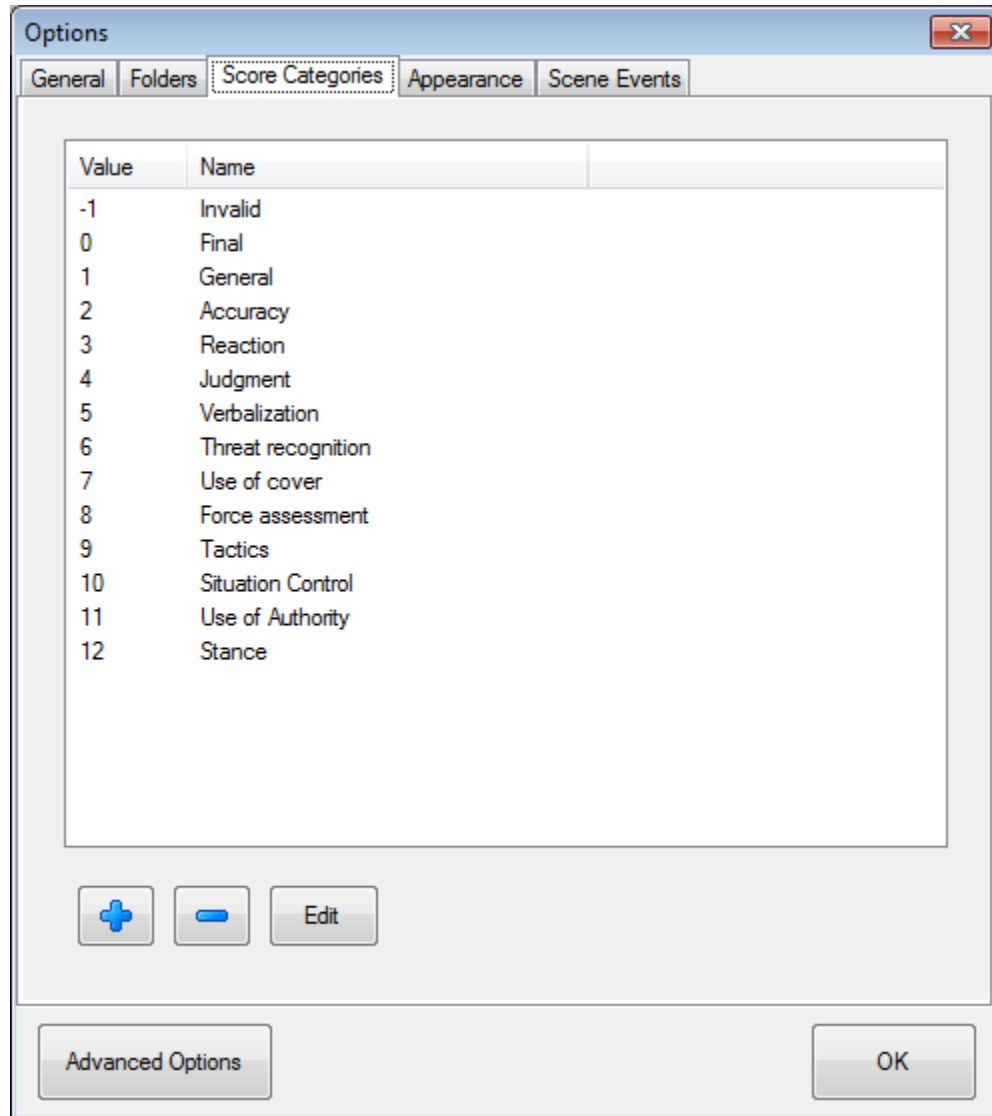


Default Folder Settings:

- Templates: "C:\MILO\Tempaltes"
- Application Icons: (installation folder for software)
- Images: "C:\MILO\Images"
- Sounds: "C:\MILO\Audio\Sound Effects"
- Video: "D:\MOVIES"
- Documents: "C:\MILO"
- System Files: (installation folder for software)

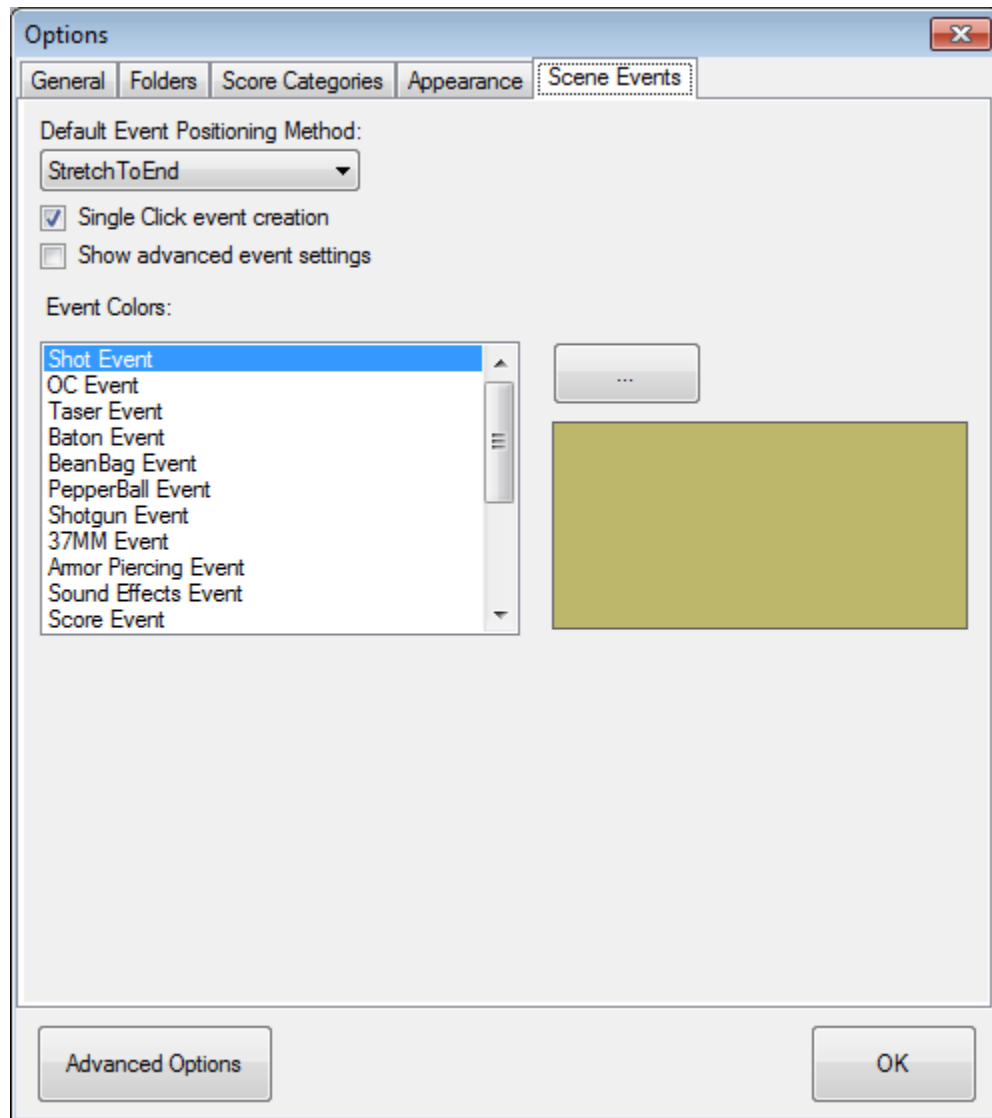
Score Categories

The Score Categories options in the Course Designer allow the user to setup the Score Categories that they will use for all the lessons edited on the system. It is a simple list with an index value. This index value is used for compatibility between systems. In single system situations, the index values can be ignored. In cases where multiple MILO systems exist, it is best to synchronize score categories and their names using the index values to avoid overwriting a system's categories. The image below illustrates the default list of score categories supplied on the system.



Scene Events

The Scene Events options allow you set the default event placement method and color coding for the different scene events supported by MILO Course Designer.



CHAPTER 6 – Advanced Features

This chapter will describe the advanced features available in the MILO Course Designer application.

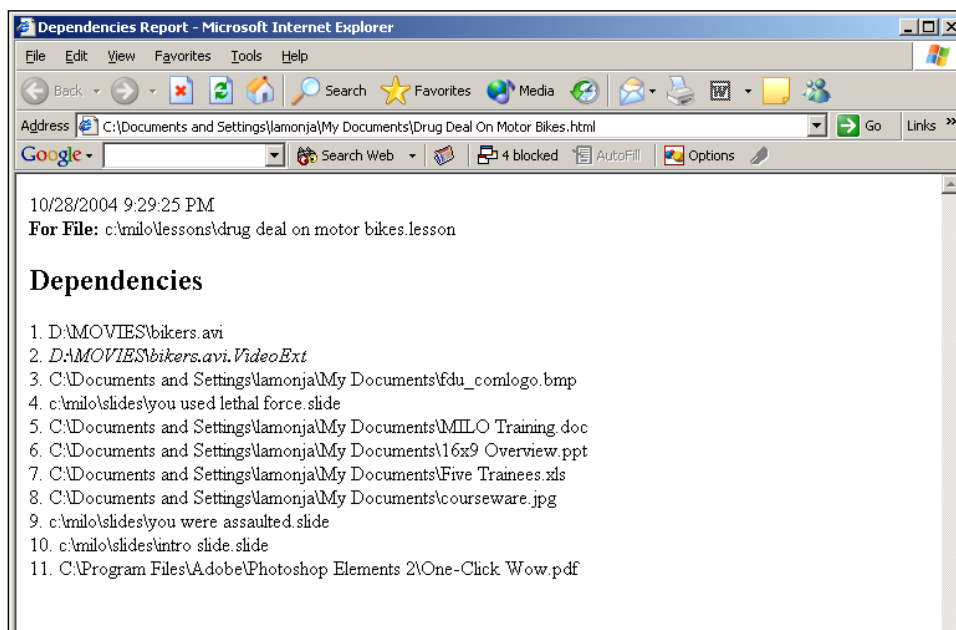
Packaging & Dependencies

MILO Course Designer offers flexible tools to create curriculum for local and distributed systems. To be able to do this, Course Designer links to resources by default, rather than embedding them. An example of linking is the use of a video file for Scene lesson item. While the lesson file contains the Scene lesson item, neither stores the actual video file inside of it. This designed behavior and is to prevent users from creating very large lesson files without intentionally doing so. Additionally, by using linked items rather than embedding them in every case, you can manage (edit) those linked resources from a single location and have changes reflected in all the lessons that use the resource.

The potential issues that can arise when using a system which links resource rather than embedding them must be understood by the user, especially when creating curriculum which will be used on systems other than computer which the curriculum is originally created on. Since Course Designer links to resource by default, a reporting tool to inform the user about all of the linked resources (called “dependencies”) in a given Course, Class, Lesson and even standalone lesson items, is provided.

Dependency Reporting Tool

You can use the Dependencies report tool on the Tools menu in Course Designer to create a list of all of the files a Course, Class, Lesson or standalone lesson item file is using. Collectively, Courses, Classes, Lessons and standalone lesson items files are generally referred to as MILO files. When selecting the tool, the system will prompt you to select the MILO file from a Windows file-browsing screen. Browse & Select the MILO file you wish to generate the report on and click Open. The system will then ask you where to save the report. Browse to the folder and type a name for the report, then Click save. The report is saved and opened for the user to view. The information contained in the report includes the paths (folders) and file names for each dependency (linked file).



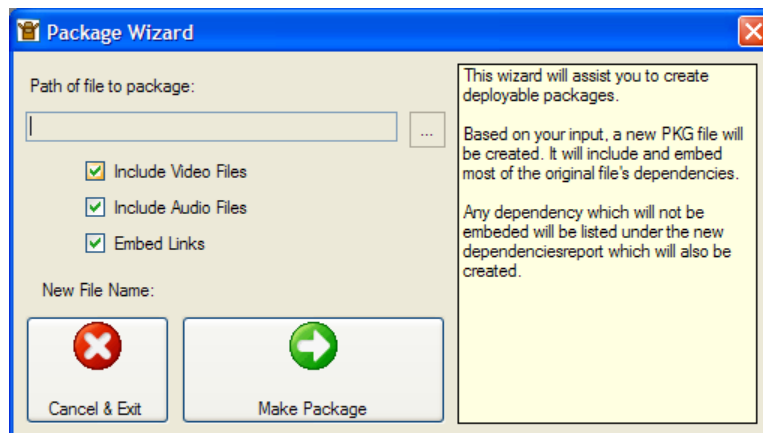
Dependency Report Example

Packaging Wizard

While the MILO Course Designer allows you to create very small but powerful MILO files, they do not necessarily contain everything inside of them; which may be required to run on another computer system. For example, a lesson titled “*Introduction Lesson*” is created on System A. The lesson and its lesson items use several video and image files on the computer (System A). Once completed, the lesson file is copied to System B. If System B does not already have the video and image files used by the Introduction Lesson, it will not run; a message informing the user that some dependencies are missing. The names of the files required to run the lesson are listed in the message.

There are two options that can help users avoid this situation. Option one is to manually copy the video and image files from System A, into the appropriate folders on System B. The alternative is to use the Packaging Wizard.

The Packaging Wizard provides a simple way to select a MILO file and create a MILO Package file out of it. This package file would contain all of the dependencies required to playback the selected MILO file on another system. The Packaging Wizard provides options to select which dependencies to include in the Package file which will be created. After selecting the Package Wizard from the Tools Menu, the Package Wizard screen is displayed.



Packaging Wizard

Click the file browse button to select the MILO file that you wish to create a Package from. Select the types of dependencies you wish to be included in the Packages file. If you are unsure about which types to include, leave all of them checked to ensure that everything is included. Click the Make Package button. The system will then begin packaging the selected file and its dependencies. Once completed, a new package file, with the same name as the selected MILO file to package is created. If you included video files and other large files, you will notice that the PKG file is now significantly larger in size than the original file you made the package from. This is to be expected since all the dependencies are now embedded in the Package file.

Transferring & Playing Package Files

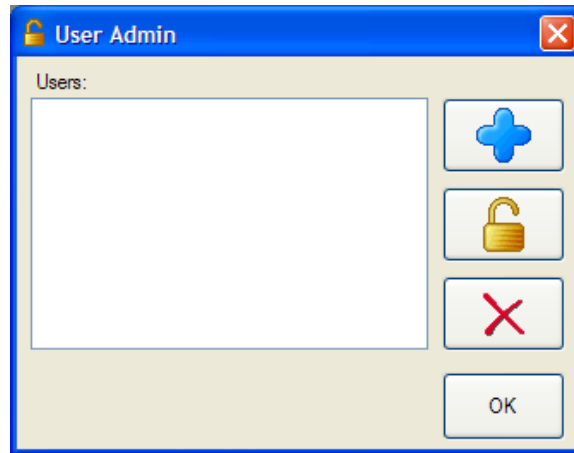
Once a package file is copied to a new system, it is not necessary to “unpack” it. You can simply copy the file to the target system’s lessons folder then select and play the Package file directly from the Lesson Browser within the MILO Range or MILO Classroom.

NOTE: The first time the package is selected and played it may take several minutes to load while the video is extracted and copied on the system for quick playback and performance. In the status bar at the bottom of the MILO Range and MILO Classroom it will display a message indicating that the system is extracting the video for playback. This will only occur the first time the package is played, subsequent attempts to play the package will have no noticeable delay.

Application Security

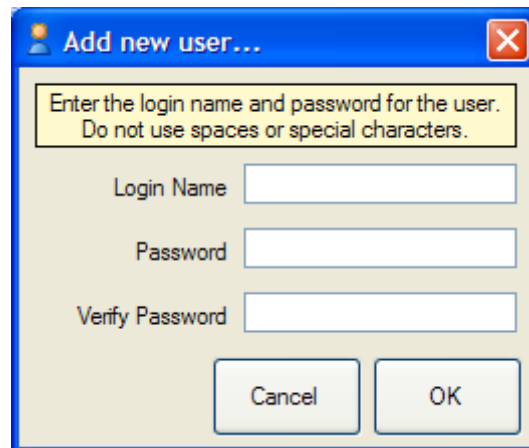
MILO Course Designer offers an optional secure login which will require a valid Password and User Name to access the Course Designer. Unlike MILO Range and MILO Classroom, once a user is logged into the Course Designer, they have full access to all features.

To enable login security for Course Designer, add at least one user to the User Admin screen. To add a user, select User Admin from the Tools menu.



User Admin

Click the Add button and enter the required fields and Click OK.



Adding Course Designer New User

The new user is added to the User Admin list. From this point when opening Course Designer you will be required to login with the User Name and password just created, or another valid User Name and password (if any).

Caution: Once you enable login security by creating users, there is no simple mechanism to recover your passwords. A remote dial-in session from IES technical support will be required to reset and disable login security.

Scoring

MILO Course Designer and other MILO training systems allow the user to assign scores in multiple categories in the same lesson. This provides a flexible and extensible scoring system. In addition the scoring categories can be edited and synchronized amongst systems to provide a consistent scoring platform for multi-system agencies.

Due to the nature of scoring records, and the potential for legal subpoena, Course Designer and all other MILO training systems offer training records that range from nothing being kept, to partial training records with pass/fail type information, to complete scoring assessments and training records. The user can change how they keep training records and scoring information at any time.

When editing lessons, if you know your agency will be keeping records with scoring information you can predefine the score categories which the student or trainee will be assessed by. All score categories can be set to either Pass/Fail or a score value from 0 to 100. Additionally, you can mix and match Pass/Fail and value scores in the same lesson.

To predefine the score categories for a lesson, you create the lesson's default score sheet. This score sheet and its categories will be applied to each student or trainee who is run through the lesson. The instructor or trainer will still have the option to alter the categories and values given (if they have the security permissions to do so), but the score sheet can provide a starting point for the assessment.

To setup a lesson's score sheet, Right-Click in the lesson editing view and select Edit Score Sheet. Click the Add button to add a score category. Click the drop-down menu next to the name of the score category to select which category to use. The categories available here are the Score Categories created on the options screen of the Course Designer. The user can enter Max Score values that will limit the possible score. The Calculated Max score is derived by Course Designer and cannot be edited. The Is Pass/Fail option allows you set the score category as a Pass/Fail rather than a value score by default. The Preset Value setting allows you to assign a starting score for the category, as long as it is not set as a Pass/Fail category. When finished adding categories, Click OK.

Category	Max Score	Calculated Max Score	Is Pass/Fail	Preset Value
General	100	100	<input type="checkbox"/>	
Accuracy				
Reaction				
Judgement				
Verbalization				
Threat recognition				
Use of cover				

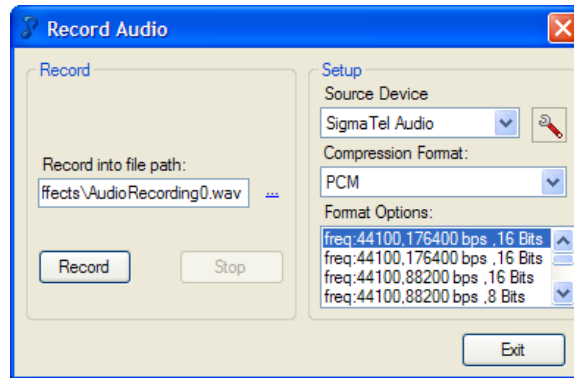
Edit Lesson Score Sheet

Recording Audio

Many lessons and presentation will include voice over style audio. To enable users to record their own audio voice over there is a simple utility built into the Course Designer. To access the Record Audio utility, click the Record Audio button on the main toolbar or select Record audio from the View menu.

Simply click the browse link next to the file path for the audio file to record to, to set a name and location for the audio. Click the Record button to start recording. Click Stop when you are finished.

For advanced users, selecting alternative audio recording devices, setting up those devices, and setting compressions and format options are also available on this screen.



Record Audio

Video Playback Settings

All MILO software products share a common framework for video playback. This allows tight integration of editing and training systems. By default whenever a video file is first opened, played or used by any of the MILO software products, the Video Playback Settings are determined and stored into a file ending in VideoExt in the same folder as the video file itself. This VideoExt file stores all of the settings that allow MILO systems to efficiently and accurately playback the video file. Additionally, this is where the Hitzone information is stored for the video file.

In the case of a video file where a non-standard format is detected, the system's ability to play the video file may be affected. MILO Course Designer offers an editing view to change or reset the video playback settings for a video file, by accessing and updating the VideoExt file for the video.

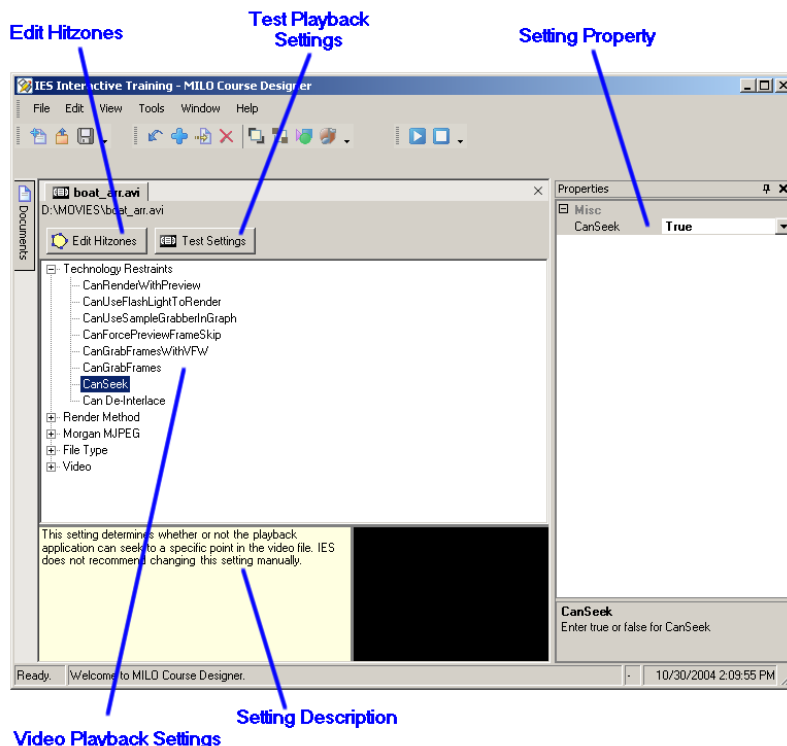
NOTE: It is recommended that only advanced users use the video playback settings view. Making changes to video playback settings without understand them can cause videos to lock-up or the system to crash. If you are unsure of the changes that may need to be made to a video file's playback settings, contact IES Technical Support before attempting to use this editing view.

To access the video playback settings view

- Double-Click a video file in the Documents dock
- Use the main toolbar or main menu to open a video file
- Double-Click a video lesson item after the video file property has been assigned

Selecting a property in the editing view will produce two key pieces of information. The first is the description of the property in the Video Settings tips area at the bottom of the workspace. The second is the value or setting for the selected property which appears in the properties dock. This is where you change the setting for the property, if need be.

A button to access the Hitzone editing view to create or edit Hitzones for the video file is provided. A second button to open the IES Player to test the video settings is also provided.

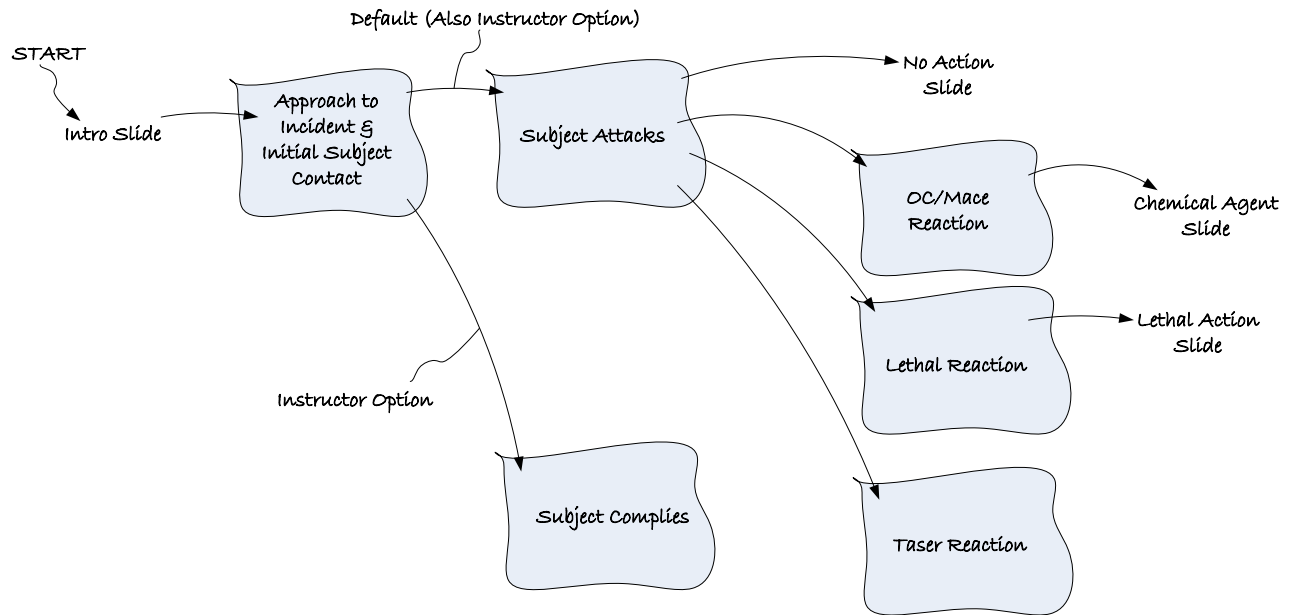


Video Playback Settings

Lesson Edit Wizard

MILO Course Designer includes a lesson editing wizard to help quickly create a new force/no-force training scenario. The following storyboard should be used to film the scenario, as only this storyboard flowchart is supported.

NOTE: You must film at least one of the reaction scenes, but you do not have to film all of them.



Wizard-Compatible Storyboard

After you film and capture the video, the lesson editing wizard will walk you through the creation of the intro slide, each of scenes, as well as the Hitzones and branching options, resulting in a completely edited lesson, ready for training. You can also go back and edit the lesson at any time using the normal lesson editing features in MILO Course Designer.

Simple Capture

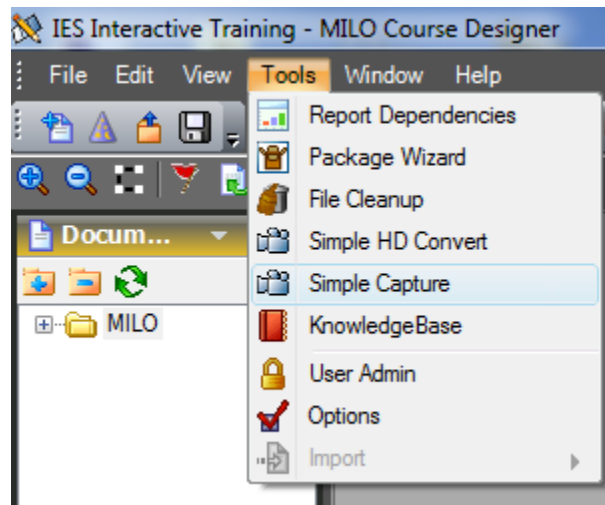
Simple Capture is the utility provided by IES to capture standard video, for scenarios, onto the MILO Range system.

Connecting the Camcorder

Ensure that your camcorder is on “play” (or VCR) mode. Using the camcorder, rewind or fast forward to find the desired starting point of the video you wish to capture. Connect the firewire (may be labeled “1394”) from the camcorder to the MILO Range computer.

Capturing Video

Open MILO Course Designer. Click on “Tools”, and select “Simple Capture” to open the Simple Capture software.



Click on the “Capture” button start the playback on the camcorder.



When finished, click the “Stop” button on the software, then stop the playback on your camcorder.

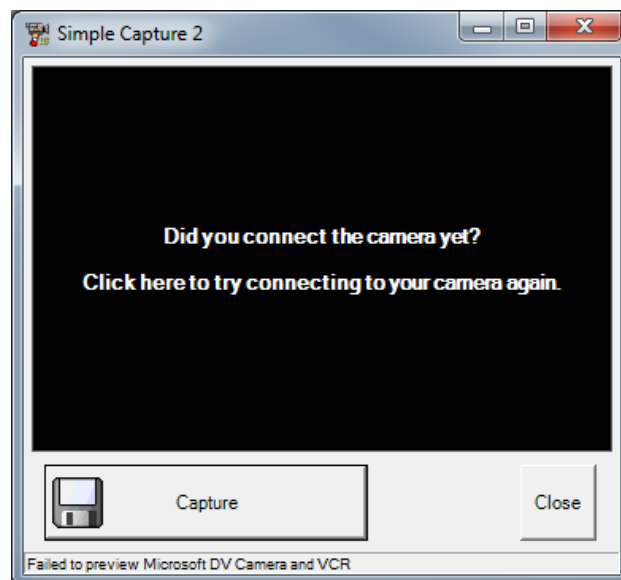


The system will prompt you where to save your video file. As a standard you should always save the file to your MOVIES folder should be located at "D:\Movies".

Close Simple Capture and disconnect the camcorder. You are now ready to begin editing a lesson with the captured video.

Simple Capture Troubleshooting

If your camcorder is not connected properly, the Simple Capture will ask you if the camera is connected.



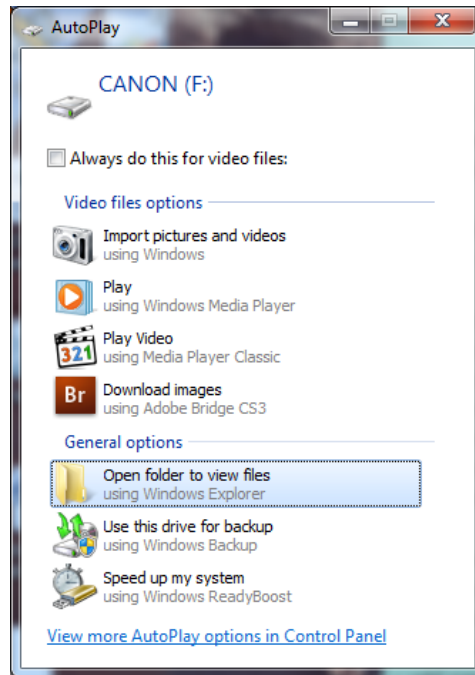
If this happens, ensure that the camera is powered on and set to VCR mode. Disconnect and reconnect the firewire cable from the MILO system and from the camcorder. Once you have properly connected the camcorder click on the white text to reconnect to the camcorder.

Simple HD Convert

Simple HD Convert is the utility provided by IES to capture high definition video, for scenarios, onto the MILO Range system from hard-drive based AVCHD camcorders. Note that Simple HD Convert does not support HDV or standard definition camcorders.

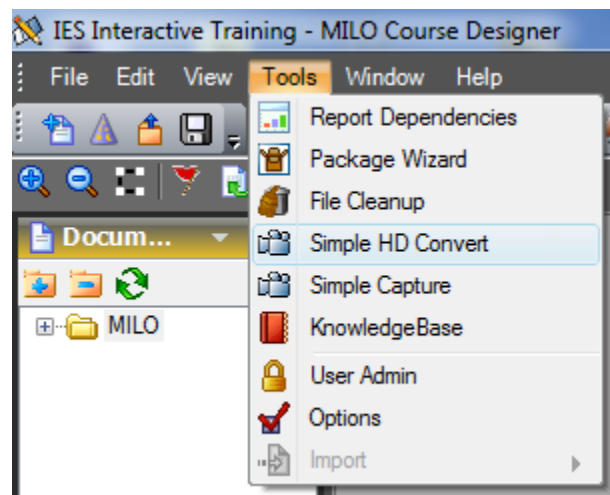
Connecting the Camcorder

Ensure that your camcorder is on “play” (or VCR) mode. Connect the USB cable to the camcorder and to the MILO computer. If you are prompted that new hardware was connected, wait until Windows informs you that the new hardware is ready to use. If you are prompted to take an AutoPlay with the camcorder, simply close that window.

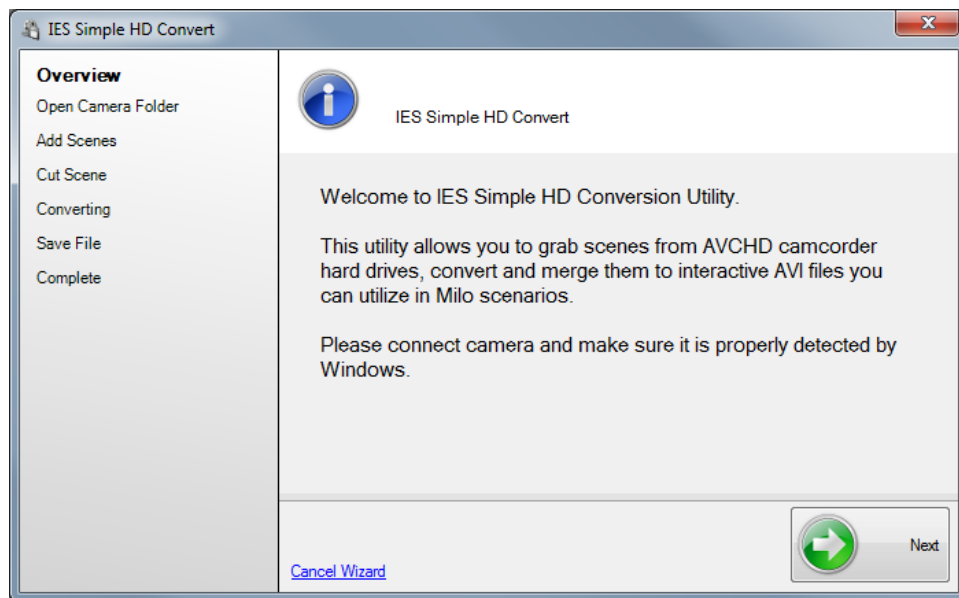


Capturing Video

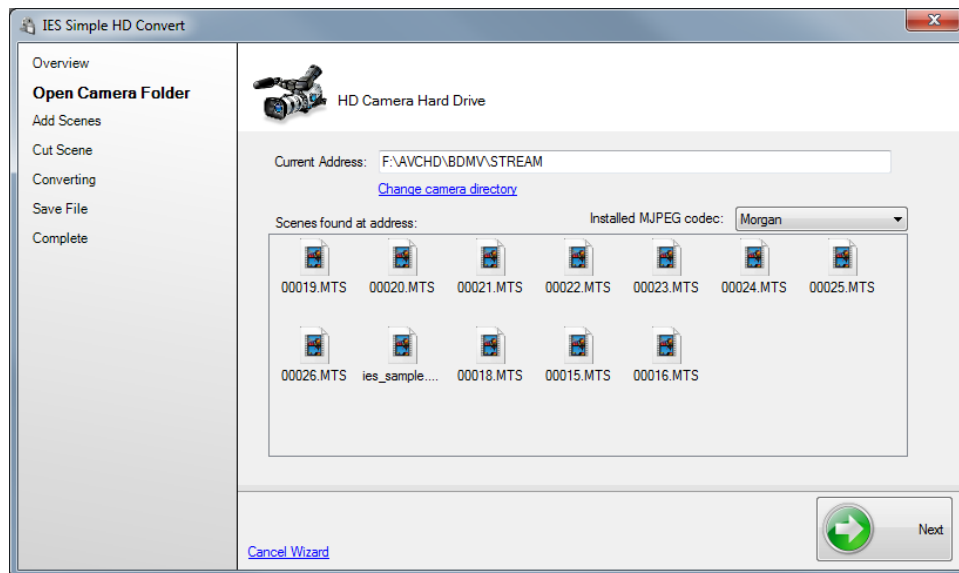
Open MILO Course Designer. Click on “Tools”, and select “Simple HD Convert”.



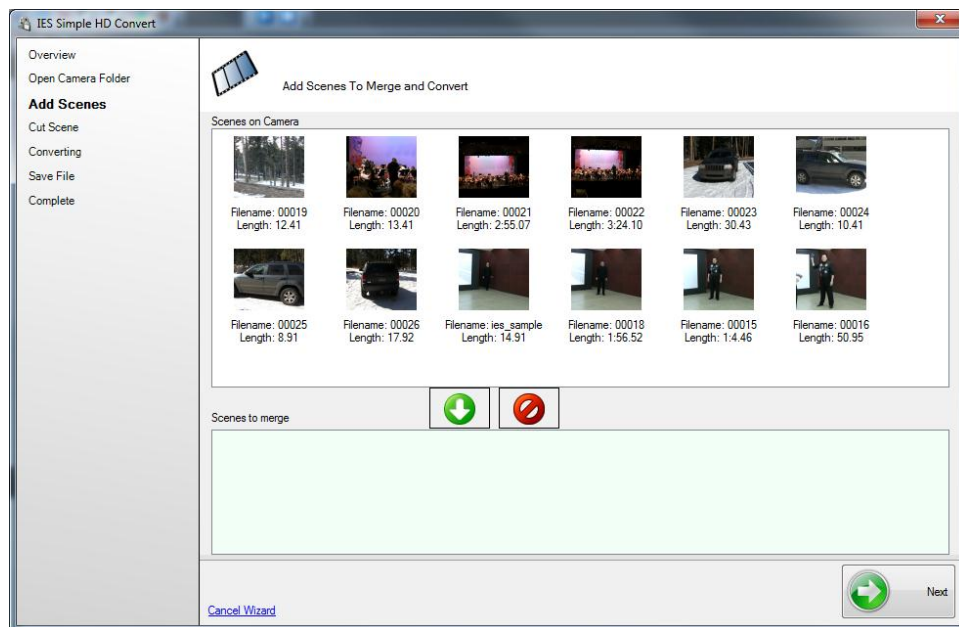
Click on the “Next” button to begin the process of selecting videos to convert.



In the next screen, you will see the files that are on your camcorder. If you do not see any icons in the list of scenes, use the “Change Camera Directory” to navigate to the folder on the camcorder where the “MTS” video files are located. Ensure that the “Installed MJPEG codec” is set to Morgan and then click “Next”.

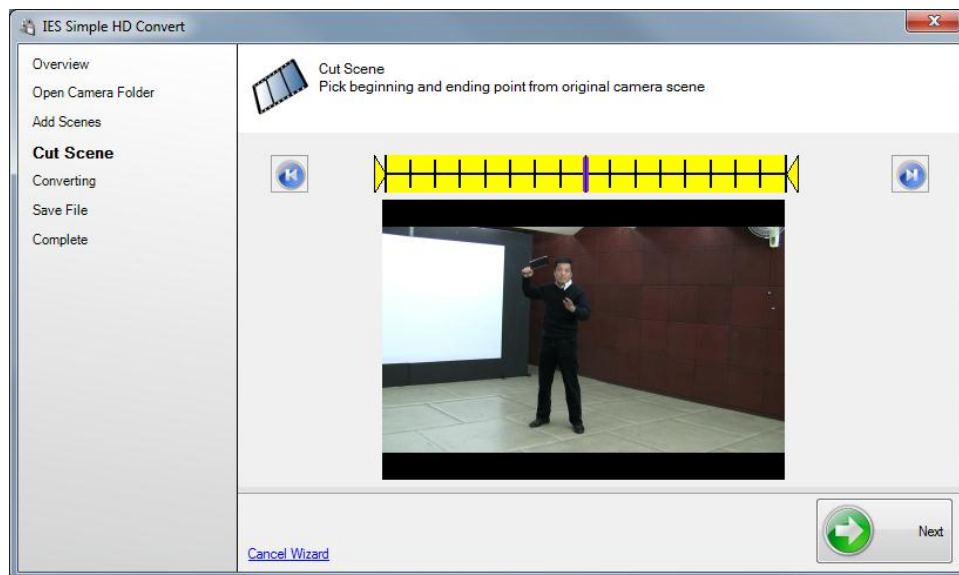


In the next screen, a thumbnail for each scene will be displayed. It may take 2 – 3 seconds for each thumbnail. If you find that it is taking a long time, you want to consider removing old scenes that you have already converted and used for scenarios. You can remove them by simply deleting or by copying (as a backup) to your my Documents folder.



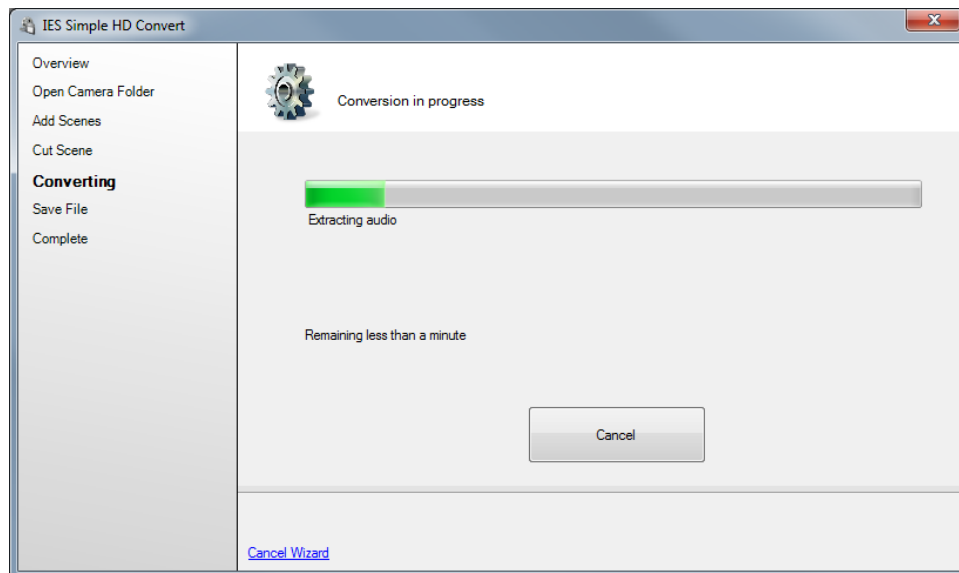
To include a scene in your final video that will be used for the scenario, simply Double-Click on the thumbnail for that scene, or click on it then click the Down arrow button. It will appear in Scenes to Merge section. Only those scenes whose thumbnail appears here will be included in the final video file. To remove a scene from the Scenes to Merge section, click on it then click the red Cancel button next to the Down button. When you have selected the scenes you want, click “Next”.

For each scene you selected, you will be prompted with the following window to allow you to trim the scene to remove unwanted footage. If you don’t want to trim the scene, simply click “Next”.



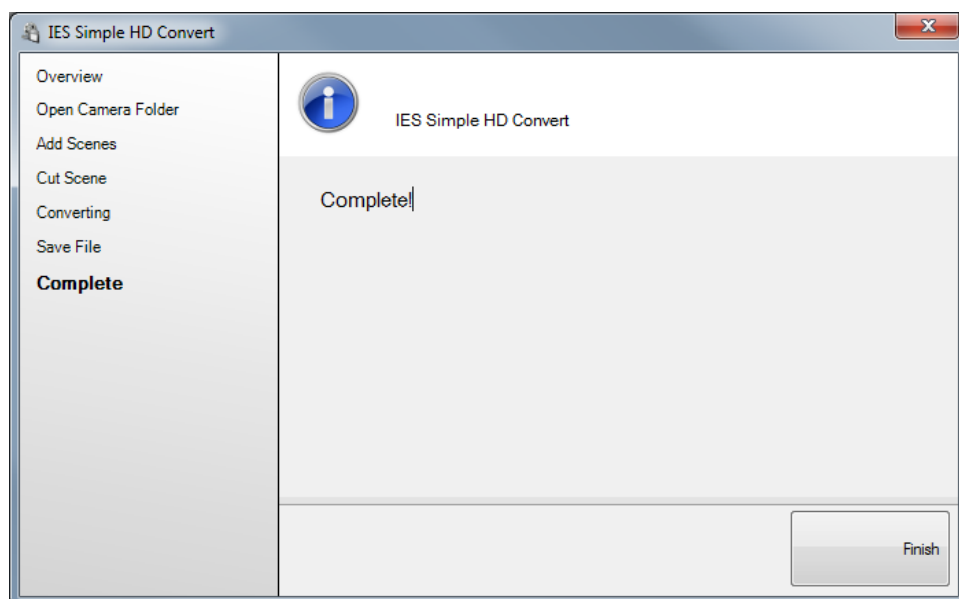
If you do want to trim the scene, use the left and right Yellow indicators to set the start and end points for the footage that you want to include in the final video, then click “Next”.

When you have clicked “Next” on the last scene, the system will begin the conversion process.



When the conversion process is finished, a single MILO compatible AVI video file is created. The system will prompt you where to save the video file. As a standard you should always save the file to your MOVIES folder, which should be located at “D:\Movies”.

Close Simple HD Convert by clicking “Finish”.



Disconnect the USB cable from the computer and the camcorder and power off the camcorder. You are now ready to begin editing a lesson with the captured video file.

Simple HD Convert Troubleshooting

Camcorder not Detected or Connecting

If your camcorder is not detected by the computer, you should ensure that:

- The included power supply is connected to the camcorder.
- The camcorder is in playback or VCR mode (usually a blue or other non-red icon represents this mode).
- The camcorder connection mode is set to “Computer” or similar. Do not choose DVD Burner mode.

Once the above are confirmed, re-open the Simple HD Convert software.

Can't see Thumbnails of Scenes

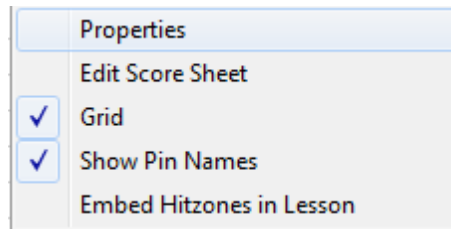
This means the software that decodes the video is not installed properly or has been corrupted by some other software being installed over it. Contact IES Technical Support to resolve.

VoiceOver

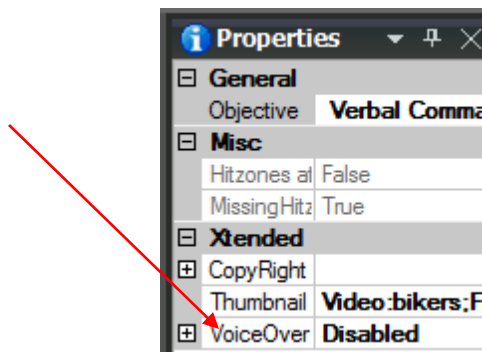
The VoiceOver feature provides a simple method for converting any video scenario to another language. With this capability, the entire IES scenario library is available to every MILO Range customer worldwide without regard to what language the scenario was originally filmed in.

To convert a scenario to another language, follow these steps:

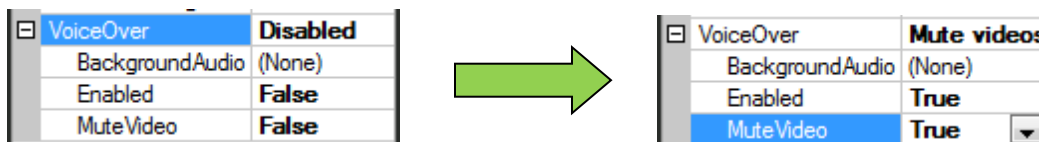
1. Open the lesson using MILO Course Designer. If you wish to keep the original lesson, it is recommended to use the “Save As” function on the file menu now to create a new copy of the lesson that you will perform the VoiceOver work on.
2. Right-click in the blank space of the lesson graph and select Properties from the menu.



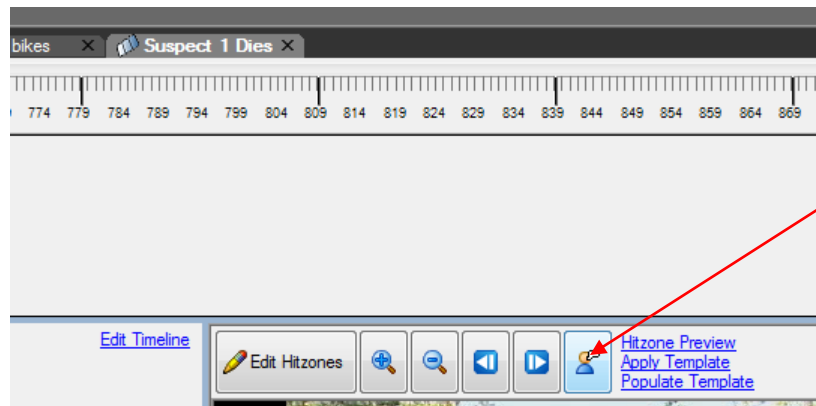
3. In the properties dock, expand the VoiceOver properties by clicking on the + sign.



4. Set the Enabled property to True to enable VoiceOver for this scenario.
5. Set the MuteVideo property to True to mute all audio from the video file so that none of the audio, including the English language dialog is heard.



6. Now that all the audio of the video is muted, you need to select a new background audio file to create an appropriate ambiance for the scenario's environment. The BackgroundAudio property will allow you to select any of the standard background audio files provided by IES. You can browse to the files IES provides in the folder “C:\MILO\Audio\Sound Effects”. The background audio files have names starting with “BK”. You can also use any WAV or MP3 audio file.
7. You can test the scenario using the toolbar Play button now. During playback you should hear only the background audio you selected. Now, for each scene where there is an on-screen subject who is speaking, you will need to record new dialog using the microphone.
8. Open the scene and position the light-blue frame indicator at the point where the on-screen subject begins speaking. Click the Record VoiceOver button. The recording will begin immediately while the video play. Speak clearly into the microphone to record the desired dialog. Click the Record VoiceOver button again to stop the recording.



9. Repeat step 8 as many times as necessary in this and the other scenes in the lesson.
10. If necessary, you can also add sound effects to each scene using the toolbar event button for Sound Effects.
11. You can test the VoiceOver work using the Play button on the main toolbar. You must have the lesson graph view active, then click the Play button.