

# **ProCAP®**

## Closed Caption Authoring System User's Guide

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# Using On-Line Help

On-line help is available, accessed through **H**elp → **ProCAP Help** from the Word main menu.

Users are encouraged to report errors or omissions in, as well as to provide comments regarding these publications to: [manuals@procap.cc](mailto:manuals@procap.cc)

## **About this Manual**

## About this Manual

The manual available on-line is the most recent and supercedes all previous publications.

This manual provides detailed, technical information concerning the ProCAP System. It is designed to assist the user in navigating through ProCAP, creating transcripts, creating captions, formatting the captions and creating a Transfer Application file which takes the transfer file output from ProCAP and encodes it to video.

 ProCAP supports multiple standards on output. This manual addresses all standards. Where there are specifics to a given standard, that is outlined in the specific sections.

The hardware and software components that come with the Application are explained as are the various components of the ProCAP Application - how they work together and how ProCAP fits into a captioning facility.

- Conventions used
- Terminology
- Intended users

First time users of ProCAP should read through the Tour of ProCAP section in the manual. This section is designed to give users a quick overview of how to caption using ProCAP. As captioners become more familiar with ProCAP or have different captioning requirements, the Authoring in ProCAP section will allow them to better understand the robustness of the ProCAP system.

Contents of this manual are subject to change without notice.

## Conventions Used

ProCAP supports multiple standards on output. This manual addresses all standards. Where there are specifics to a given standard, that is outlined in the specific sections.

The words **caption** and **subtitle** will be used interchangeably. For the purpose of this manual, recognizing there may be differences in content and/or style, caption is used universally to refer to the caption or subtitle in the Word document.

Instructions and commands are provided in the order in which they are to be carried out.

Menu names, dialog boxes and options are set in **bold** type.

Commands are available either through the menu, the ProCAP tool bar, or user configurable keyboard shortcuts. ProCAP functions are also available as macro calls from within Word to accommodate user customizations.

When menu commands are described, the term execute is used when they should be run.

Arrows ( → ) are used to represent the menu path to a feature.

Keyboard Shortcuts are specified as a combination of keystrokes. A plus sign (+) is used to indicate simultaneous keystrokes, a comma (,) is used to separate consecutive keystrokes. The duplicate keys on the numeric keys are preceded by "Num".

Modifier keys (**Alt**, **Ctrl**, **Shift**) are abbreviated as labeled on the keyboard.

There are usually several ways to perform a given command, using menus from the Word command menu, pressing the given command button or executing a Keyboard Shortcut Key(s). Where possible, all options will be listed. For example, when saving a file, one of the following methods can be used:

- executing **File** → **Save** from the Word menu
- pressing the **Save**  command button from the Standard Word Toolbar
- executing **Ctrl + S**

Command buttons are located on the ProCAP toolbar unless otherwise stated.

A listing of the menu commands, ProCAP command buttons and default shortcut keys can be found in the appendices.

Where possible, more than one method will be outlined, but these may not be the

only ones. For a complete listing of all commands, refer to either the Microsoft Word help manual or the ProCAP Command Reference listing within the ProCAP manual.

 Hints and tips offered in each section are denoted by the flashbulb symbol .

 Important requirements are denoted by an exclamation symbol .

## Terminology

The ProCAP Manual uses the following terminology:

- the word caption is used to refer to either a caption or a sub-title
- the term click and double-click refer to clicking and double-clicking the left mouse button. If the right mouse button is required, right is specified
- to drag captions or the Playbar in the Timeline – click and hold with the left or right mouse button and move the mouse
- to drag captions in the Player – click and hold with the right mouse button and move the mouse
- the term destination point refers to the point to which you want to drag the object
- an in-point for a caption refers to the frame of video at which a caption first displays - this is a time code value
- an out-point for a caption refers to the frame of video at which the caption is no longer displayed - this is a time code value
- ProCAP<sup>®</sup> refers to the ProCAP Authoring Application
- Windows<sup>®</sup> refers to Microsoft Windows<sup>®</sup> XP
- Word<sup>®</sup> refers to the Microsoft<sup>®</sup> Word XP

## **Intended Users**

This guide is written for the professional Captionist. Users are expected to be the same individuals who are using ProCAP. As such, we have assumed some basic understanding of Windows and Word. For more information on either of these, see the associated on-line help.

# ProCAP Overview

ProCAP® is a complete off-line non-linear caption preparation system designed for the professional broadcast and captioning market.

Using standard Microsoft compatible source capture files, Microsoft Word as the front-end Editor and a Windows based Transfer Utility ProCAP allows users to quickly and efficiently create closed captions in conjunction with time coded program material.

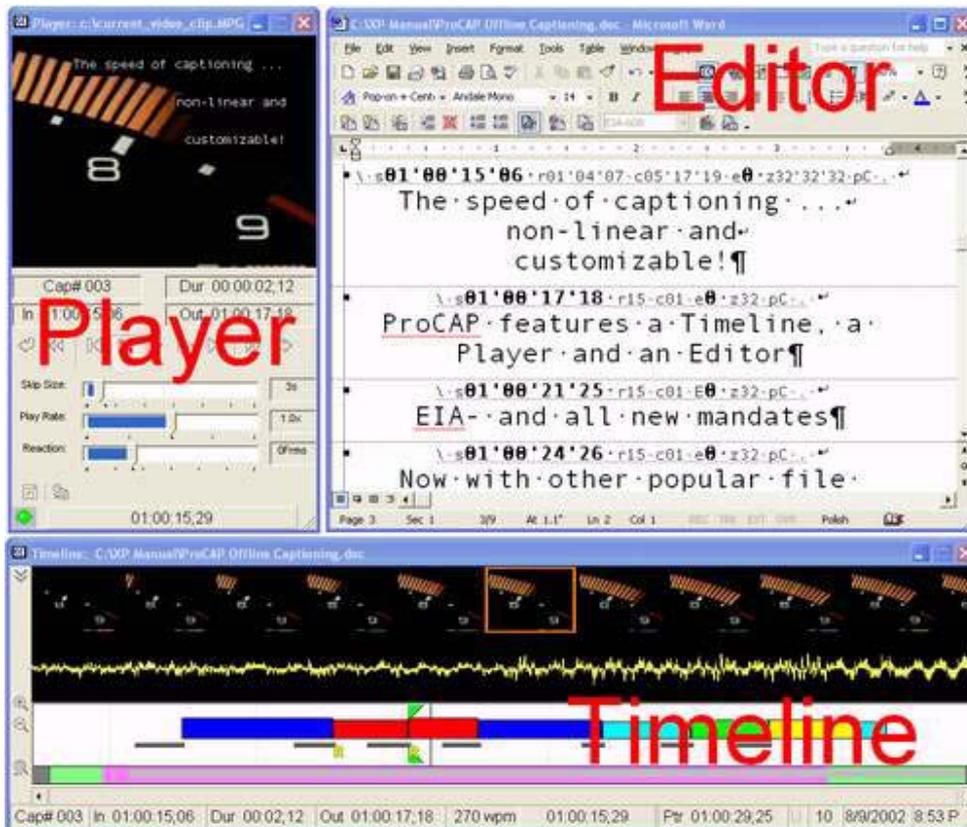
ProCAP is comprised of three independent components that work together to allow the user to control the complete captioning process.

1. **Capture Utility** - used to digitize the source video into standard Microsoft video files for non-linear use with ProCAP
2. **Author Application** - used to create, edit and preview the captions prior to generating a Transfer file
3. **Transfer Utility** - used to encode the captions to video

The Capture Utility provides synchronous capture of video and stereo audio into a small Source Clip File. This video file is viewed in the Player, giving users non-linear playback for transcribing captions as well as caption preview over video in a WYSIWYG format.

Within the Authoring Application, there is a non-linear Editor, comprised of a customized version of Microsoft Word, a Player, and a Timeline.

ProCAP Authoring System Windows:



The ProCAP windows can be sized on the computer screen to fit suit users preferences, allowing for easy viewing and movement within the captioning project.

### **The Editor**

Using Microsoft Word, ProCAP extends the functionality of this versatile word processor allowing users to import or create transcripts, author and edit captions, caption styles, format and positioning all within one document.

### **The Player**

The Player provides non-linear play control over the source video file to be captioned. Captions can be previewed over video for WYSIWYG display, timing, positioning and justification.

### **The Timeline**

The Timeline provides non-linear access to the entire source video file loaded in the Player, and a visual summary of the display of captions over time from the Editor. The entire source video file can be quickly navigated from the Timeline

summary. The Timeline allows direct access to the current Player source video frame, and adjustment of the in-points and out-points of captions. On Windows XP systems, the Timeline also provides a film strip of the video frames around the current position with associated audio wave form.

## **Interactions**

The three windows interact base on time code. The Player determines the current source video frame. The cursor position in the Editor determines the current caption. The Timeline reflects the status of both.

The independent windows allow for user control over size and orientation.

All main functions can be done with the mouse or keyboard shortcut keys from within the Editor.

## **The Transfer Application**

The Transfer Application ensures accurate and consistent encoding of captions to video. The transfer files generated from the Authoring System can be sent to the Transfer Application over a network or on floppy. The data is sent to the Encoder, as determined by time code from the source video. ProCAP and other popular caption file formats are supported.

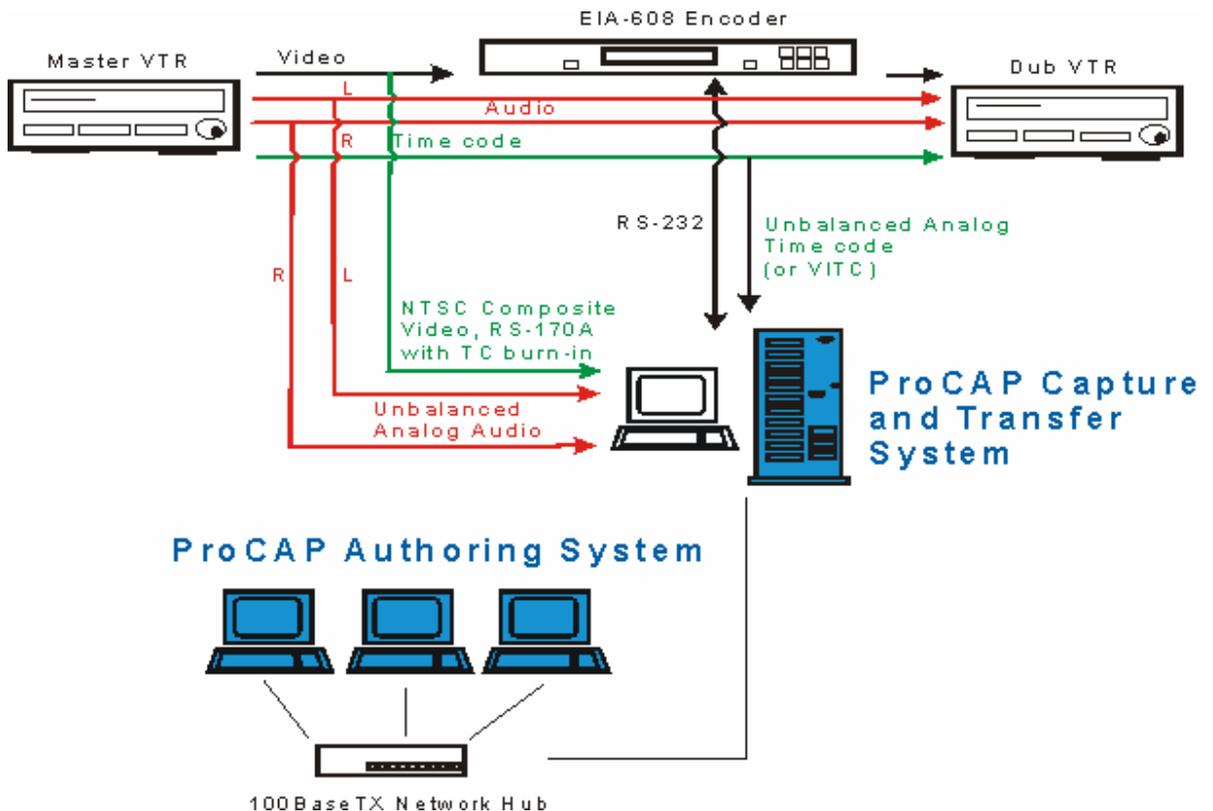
## **Networking**

ProCAP is based upon Microsoft Windows 2000/XP, and is completely scalable. ProCAP can function as a single standalone system, or as a network of independent systems. The recommended configuration has one or more ProCAP Author stations, located in captioning, 100BaseTx networked to one or more ProCAP Capture-Transfer stations, located in the equipment room. For further details refer to ProCAP in the Facility.

# ProCAP in the Facility

ProCAP is designed to integrate into your facility and is fully configurable and scalable to meet workflow requirements.

Capture, Authoring and Transfer Applications can function as a single standalone system or as part of a networked solution.



The **ProCAP Authoring System** is a complete offline non-linear caption preparation system that provides a cost-effective and flexible solution. ProCAP is designed to allow businesses to easily adapt to future closed captioning mandates and changes in technology requirements.

The **ProCAP Capture Application**, uses the ATI Capture Utility, to capture source video and audio. Users have full control over the compression settings. The Source Video Files are stored as standard Microsoft video files and can be used on any standard Windows based system, allowing for shared access for other purposes. Scene change lists can be created using tools such as VideoWave4 from MGI.

The **ProCAP Transfer Application** ensures accurate and consistent encoding of

captions to video. Transfer files generated from the Authoring System can be sent to the Transfer Application over a network or on floppy. ProCAP and other popular caption file formats are supported.

**Networking.** ProCAP systems are network ready supporting 10BaseT and 100BaseTX to allow for quick LAN integration or creation.

# Getting Started

## **Microsoft Word and ProCAP**

ProCAP is a plug-in in Microsoft Word. ProCAP uses all the functionality of one of the most universal word processors.

ProCAP in operation follows the philosophy of Word, that is, use of block selections for applying an operation to more than one caption at a time, and use of built-in attributes and styles, to name a few.

For further help on any of the Word topics, **F1** will provide on-line help. ProCAP help (this manual) can be found through **Help** → **ProCAP Help**.

For further details refer to the Word Compatibility section.

## Opening a Caption File

### Creating a New Caption File

1. To create a new caption file:
  - If Word is not already open start Word. A blank document is opened by default, and will serve as the new caption file.
  - If Word is already open, to create a new caption file:
    - execute **F**ile → **N**ew from the Word menu.
    - press the **New Blank Document**  command button on the Standard Word Toolbar.
2. Next, start ProCAP.

### Opening an Existing ProCAP Caption File

1. To open an existing ProCAP caption file, use one of the following methods:
  - Start Word. Navigate to the existing caption file using one of the following methods:
    - execute **F**ile → **O**pen from the Word menu
    - press the **Open**  command button on the Standard Word Toolbar
    - execute the default Word shortcut **Ctrl + O**
    - Start Word. Open the recently used caption file from the list at the end of the Word **F**ile menu.
    - Open the recently used caption file from Windows **S**tart → **D**ocuments most recently used file list. This will start Word and open the selected file.
    - Navigate to the existing caption file using Windows Explorer. Double-click on the existing caption file. This action will start Word and open the selected file.
2. Next, start ProCAP.



If ProCAP is currently open on another caption file, stop ProCAP first. It is recommended that Word be closed, and started again to create a new caption file or open an existing one. This method will maintain Word's saved position on the desktop.

## Starting ProCAP

ProCAP operates as a Microsoft Word plug-in. This means that ProCAP can be started after Word has been opened with either a blank or the desired caption file.

To start ProCAP:

- execute **T**ools → **P**roCAP Start from the Word menu
- press the **ProCAP**  command button located on the Standard Word Toolbar

The ProCAP splash screen becomes visible as ProCAP starts.

At this point a blank Word document exists and the ProCAP application is running.

 Once ProCAP is started, the margins in the Word document are automatically set to 32 characters wide, so that the text can be viewed in the same format as it will appear on the screen.

Executing the **ProCAP Start/Stop** button again will Stop ProCAP.

Under some conditions the **ProCAP Start/Stop**  command button and menu entry may not be present. For information about how to restore the standard ProCAP Start/Stop button, refer to the Starting and Stopping ProCAP section within Tips for Common Problems Section of the manual.

## Stopping ProCAP

To stop ProCAP:

- execute **T**ools → **P**roCAP Stop from the Word menu
- press the **ProCAP**  command button located on the Standard Word Toolbar

All methods that can be used to start **ProCAP** will stop **ProCAP** if they are executed again while ProCAP is running.

When the user is finished with the ProCAP Application, it should be stopped prior to closing Word.

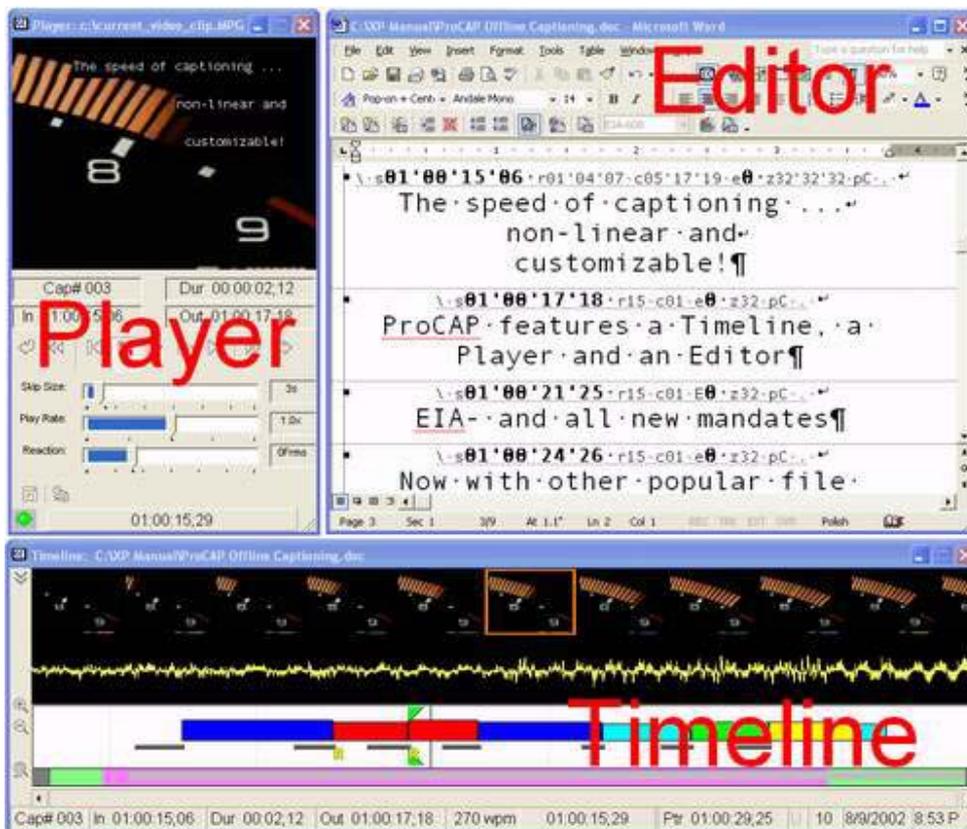
 Failure to close the ProCAP Application prior to closing the Word Application may result in the system asking if you would like to save changes to the templates procap-resident.dot and/or eia608.dot. This may also occur in the case where there has been a software bug or a Windows crash. The user response should be **No**, unless changes were intentionally made. Responding **No** when unsure will ensure that the previous settings are not overwritten. For further information about how to replace these files refer to Templates within the Word Compatibility Section of the manual.

Under some conditions the **ProCAP Start/Stop**  command button and menu entry may not be present. For information about how to restore the standard ProCAP Start/Stop button, refer to the Start ProCAP Button Missing section within Tips for Common Problems Section of the manual.

# The Three Windows of ProCAP

The ProCAP Authoring application comprises three separate windows that interact together to provide a complete non-linear caption authoring solution:

- The Editor
- The Player
- The Timeline



## Interactions

The three windows interact based on time code. The Player determines the current source video frame. The cursor position in the Editor determines the current caption. The Timeline reflects the status of both.

The independent windows can be sized and positioned on the screen based on user preferences.

All main functions that can be done with the mouse have keyboard shortcut equivalents in the Editor.

## **The Editor**

The ProCAP Editor is Microsoft Word. All ProCAP caption files are created in Word, and are native Word .DOC files. All the power and configurability of Word is available during the captioning process in ProCAP.

The Editor is the primary focus during the caption authoring process. All captions are created, modified, and saved from the Editor.

Shortcut keys in the Editor provide easy and accurate control over the Player.

## **The Player**

The Player provides non-linear play control over the Source Video File to be captioned. The Source Video File must have been previously captured into the system and made accessible by the Player to be used.

The Player has play controls for play, pause, frame forward and reverse, skip forward and reverse, caption replay, slow play forward, and go to the start and end of the Source Video File.

The Player displays the current source video frame, and its associated time code. The Player is responsible for mapping each frame to its associated time code for use within the ProCAP Editor and Timeline.

## **The Timeline**

The Timeline provides non-linear access to the entire Source Video File loaded in the Player, and a visual summary of the display of captions over time from the Editor.

A filmstrip provides a pictorial summary of the adjacent video frames to the current frame displayed in the player. This can be used to visually identify scene changes without searching frame by frame through the Player.

The audio waveform helps to visually identify on which video frames audio events change.

The entire Source Video File can be quickly navigated from the Timeline summary. The Timeline allows direct access to the current Player Source Video Frame, and adjustment of the in-points and out-points of captions.

# The Editor

## The Editor

The ProCAP Editor is Microsoft Word. The Editor is the primary focus during the caption authoring process.

Caption text entered in the Editor is absolute time code locked to the source clip in the Player.

Standard ProCAP files are backward compatible with older versions of Word. Any standard file that can be imported into Word can be used as a starting transcript. This includes standard ASCII text files and base file formats from all of the popular word processors.

Additionally ViaVoice® can be used to integrate voice recognition into the caption transcription process.

Shortcut keys in the Editor provide easy and accurate control over the Player.

## Creating captions

Captions are created and modified within the Editor. Setting caption in-points and out-points can be done using the mouse, shortcut keys, the controls in the Editor, the controls in the Player, the command buttons in the Editor, the command buttons in the Player or creating keyboard macros, depending on user preferences.

In-point and out-point time code placement, positioning and all caption information is saved within the preamble of the captions in a single Word document. Caption files should be saved as native Word .DOC files.



Archiving a copy of the Word file will ensure that all caption information is stored for future editing purposes. This is useful if the video is later edited for content or length. The new video can be captured, opened within the Player and the original captioned file opened in the Editor. The only edits to the captions or time code will be around the areas that were moved, added or deleted as opposed to re-captioning the entire captioned file for the new time code.

## Caption attributes

Within the ProCAP Editor, caption attributes are set in the same manner as they are within a standard Word document. The given caption text is highlighted, and the desired attribute is assigned. Attributes include italics, underlining, font color and background color. For further information about caption attributes refer to the Setting Caption Attributes within Preview and Editing Caption Section.

For further information about captions refer to the Anatomy of a Caption Section.

For further information about creating captions refer to the Creating Captions Section. This section explains how to create captions when starting with a blank document and how to create captions when starting with an imported transcript.

For further information about the caption preamble refer to Caption Preamble within the Anatomy of a Caption Section.

For further information about navigating within the captions refer to the Editing Captions Section.

For further information about fonts and characters used in ProCAP, refer to the Fonts Section.

## Word Compatibility

This topic provides reference information about the compatibility issues between ProCAP and Word.

Word offers a very rich environment for editing. ProCAP integrates into Word to support the process of captioning. Many features are very useful for editing, and ProCAP supports those wherever possible, and complements those with features for captioning.

### Template Files

Every Word document is based on a template. A template determines the basic structure for a document and contains document settings such as AutoText entries, fonts, short-cut key assignments, macros, menus, page layout, special formatting, and styles.

The two basic types of templates are global templates and document templates.

Global templates, including Word's Normal template (normal.dot), contain settings that are available to all documents.

Document templates, such as ProCAP's eia608 template (eia608.dot) in the New dialog box, contain settings that are available only to documents based on that template. For example, when ProCAP starts, the eia608 template is attached to the active document to activate all of the ProCAP specific styles and short-cut key assignments.

The template files used by ProCAP are:

- **Normal.dot**, the global template from Word.
- **Eia608.dot**, the document template from ProCAP. Contains the default ProCAP style definitions and short-cut key assignments.
- **Procap-resident.dot**, the global template from ProCAP. Contains the macro interfaces to all ProCAP functions, the ProCAP menu entries and toolbars.

### Making Changes to Template Files

All changes and customizations that can be made in Word and saved to a template, by default, will go to the Normal template. However, it is rarely desirable to place ProCAP customizations in the global template, where they affect all documents. The following guide helps determine what modifications to save where:

- Macros - save in normal.dot
- Short-cut Key assignments - save in eia608.dot, where the default ProCAP

- short-cut key assignments are defined
- Styles - save in eia608.dot, where the default ProCAP captioning styles are defined
- Menus - save ProCAP specific to eia608.dot; global changes to normal.dot
- Page Layout - save ProCAP specific to eia608.dot
- Special Formatting - save ProCAP specific in eia608.dot

Make changes while ProCAP is running, so that the eia608.dot template is active and available for saving changes to.

To save changes in a specific template file, select the desired template file name from those available in the "Save In" list box.

 It is recommended that backup copies of all of the template files be maintained, so that they can be restored in case of corruption.

 Word recovers all files and templates when first opened after a crash. Close all template windows - do **not** save any changes. Review any caption file for more recent changes, and save it if required, before closing Word. Close **all** Word windows after an error recovery, and start over. Reboot the system if required.

### **Saving Changes to Template Files**

Word queries before saving changes to template files upon close.

Only confirm **YES** to save changes to the normal.dot and eia608.dot templates that you have intentionally made. Otherwise, and if you can not remember what the changes were, answer **No**.

Always answer **No** to saving changes to the procap-resident.dot template.

### **Setup of Word**

On installation, ProCAP sets the following default settings for Word through the macro **WordSetProCAPDefaults**:

- In **T**ools → **O**ptions:
  - Always create a backup of the document before opening.
  - Prompt the user when Normal.dot changes.
  - Save autorecover information every 5 minutes.
  - Do not check grammar as you type.
  - Do not check grammar with spelling.
  - Do not ignore words in all uppercase.
  - Do not correct TWo INitial CAPitals.
  - Do not capitalize the first letter.
  - Do not capitalize names of days.
  - Do not correct the accidental use of CAPS LOCK.

- In **Insert** → **AutoText** → **AutoText**:
  - Do not convert straight quotes with smart quotes, both as you type and auto-format.
  - Do not replace ordinals with superscript, both as you type and auto-format.
  - Do not replace fractions with fraction character, both as you type and auto-format.
  - Do not replace symbol characters (--) with symbols, both as you type and auto-format.
  - Do not replace internet and network paths with hyperlinks, both as you type and auto-format.
  - Replace **\*Bold\*** and **\_Italic\_** with real formatting, both as you type and auto-format.
  - Delete the AutoCorrect entries that replace as symbols that have no EIA-608 equivalent.

Settings in Word that are forced every time ProCAP runs are:

- Sets Normal view of the document, for WYSIWYG preview.
- Tracking of changes is turned off and all changes must be accepted before ProCAP will start. The tools → track changes → compare documents feature can be used after editing with ProCAP is complete to review and compare revisions.
- The Num-Lock state is turned On by default.
- All revisions must be accepted before ProCAP will start. Revisions can later be checked using the Compare Documents feature in Word.

### **ProCAP Caption File Save Format**

ProCAP caption files should be saved in the native Word **.DOC** file format. This file format will save all of the document information - nothing will be lost. Other file formats may lose some of the captioning information, accented characters, or symbols.

## Creating Macros

Macros can be created in Word to simplify any repetitive task in ProCAP. This topic provides practical examples on creating macros for use in ProCAP. For further information, search for "Macros" or "Record a macro in Word" in the Word Help wizard.

The examples given here suggest a particular captioning style. Freely modify the style details to conform to local standards.

## Recording Macros

### Preparation:

1. Open an existing ProCAP caption file (or create a new one) in **Word** that has at least one valid caption, or as many needed for creating the macro.
2. Start **ProCAP**
3. Position the cursor anywhere in the target caption. The macro recorder will record every keystroke entered and save them for later recall, making this setup important.

### Recording the Macro:

1. Go to **Tools** → **Macro** → **Record New Macro**.
2. In the **Macro name** box, type a name for the macro. Avoid spaces and symbols - use mixed case.



Use a common prefix, such as MyTV, to group all of the custom macros together. This will make locating them in the global macro list at a later time much easier.

3. In the **Store macro in** box, ensure that **Normal.dot** is selected.
4. In the **Description** box, type a description for the macro.
5. If you don't want to assign the macro to a toolbar, a menu, or shortcut keys, click **OK** to begin recording the macro.

To assign the macro to a toolbar or menu, click **Toolbars**. In the **Commands** box, click the macro you are recording, and drag it to the toolbar or menu you want to assign it to. Click **Close** to begin recording the macro.

To assign the macro to shortcut keys, click **Keyboard**. In the **Save Changes in** box, select **Normal.dot**. In the **Commands** box, click the macro you are recording. In the **Press new shortcut key** box, type the key sequence, and then click **Assign**. Click **Close** to begin recording the macro.

6. Perform the actions you want to include in your macro.

 You can use the mouse to click commands and options, but the macro recorder cannot record mouse actions in a document window. To move the insertion point or select, copy, or move text, for example, you must use shortcut keys.

7. To stop recording your macro, click **Stop Recording** .

 If you give a new macro the same name as an existing built-in macro in Word, the new macro actions will replace the existing actions. For example, the File menu command Close has a macro attached to it called FileClose. If you record a new macro and name it FileClose, it becomes attached to the Close command. When you choose the Close command, Word performs the new actions you recorded. To view a list of built-in macros in Word, go to **Tools** → **Macro** → **Macros**. In the **Macros in** list, click **Word Commands**.

 The newly recorded macro, shortcut key assignment, and/or toolbar button will **not** be saved until Word is closed. Confirm with **Yes** to save changes to **Normal.dot** and **eia608.dot** to save these changes.

### Example: Lyrics

This example describes how to create a macro to make the current caption line into a song lyric, by added a music note to the beginning and end of the line, and optionally italicizing the line. The steps outlined in Recording Macros is followed below.

Follow the steps for preparation. Enter the following to record the lyric macro:

Single Line Lyric:

2. Type **MyTvLyricLine** for the macro name.
5. Assign **F8** as the Shortcut key.
6. Use the following shortcut keys to record a generic macro for making the current line into a song lyric:
  - Use **Home** to move to the beginning of the current line so that the macro will work from anywhere.
  - Use **Ctrl + I** if the lyric is to be italicized.
  - Use **Alt + X** and a **Space** to insert a music note at the start of the line.
  - Use **End** to move to the end of the current line.
  - Use **Space** and **Alt + X** to insert a music note at the end of the line.
  - Use **Ctrl + I** to turn off italics, if previously applied above.
7. Stop recording the macro

Quit Word and save changes to the document templates to save these new macros and shortcut key assignments.

Now, with the cursor on a lyric such as

Oh, Yeah

Applying **F8** will produce

*Oh, Yeah*

## **Deleting Macros**

To delete a caption, go to **T**ools → **M**acro → **M**acros. In the **M**acros in list, select **All active templates and documents**. Type the macro name into the **M**acro name box, or select it from the list of macros. Press the **Delete** command button to complete the operation.

Quit Word and save changes to the document templates to complete the deletion process.

## Shortcut Key Assignment

This topic provides information on how to create custom shortcut key assignments.

The default shortcut key assignments for ProCAP are listed in Appendix C. For further information, search for "Shortcut key assignments" in the Word Help wizard.

Shortcut keys can be assigned to any command, macro, font, AutoText entry, style, or a commonly used symbol.

To create a custom shortcut key assignment:

1. Go to **T**ools → **C**ustomize.
2. Press the **K**eyboard... command button.
3. In the **S**ave changes in box, select **eia608.dot** to create shortcuts for use in ProCAP, or the document name or template in which you want to save the shortcut key changes.
4. In the **C**ategories box, scroll down and select Macros, or any other category that contains the command or other item.
5. In the box to the right, select the name of the command or other item.
6. Any shortcut keys that are currently assigned appear in the **C**urrent keys box.
7. In the **P**ress **n**ew shortcut key box, type the shortcut key combination you want to assign.
8. Press the **A**ssign command button.

 The key combination CTRL+ALT+F8 is reserved for initiating keyboard programming on programmable keyboards, so you cannot assign this combination if you use a programmable keyboard. Many direct keys are also reserved for their respective functions, and cannot be reassigned.

Quit Word and save changes to the document templates to save these new shortcut key assignments.

# Fonts

## Closed Captioning

ProCAP can work with any configured font in Word. Configured fonts are fonts with definition files located in the **Fonts\EIA-608** folder in the current ProCAP home directory (default is **C:\ProCAP\**) and loaded on ProCAP start. Font definition files are required to cross-reference and map the font characters used during the author process in Word with the EIA-608 character values that are needed for encoding to video.

The default and recommended font is **Andale Mono** as it is a non-proportional font. **Andale Mono** allows the user to see when they have reached 32 characters on a line, which is the maximum number of characters that can be displayed in EIA-608, on a standard television set. Lines over 32 characters will be automatically word-wrapped and using a non-proportional font, such as Andale Mono, a user will be able to see in Word almost exactly how the caption will be displayed over the video.

All of the default styles within the **eia608.dot** ProCAP template file are based on the 14pt Andale Mono font.

Font selection during the author process has no effect on the final EIA-608 captions. All EIA-608 decoders determine their own non-proportional font that will appear on a television set. There is no user control over this font.

Three fonts suitable for captioning are pre-loaded by default: **Courier New**, **Andale Mono** and **Monotype.com**. If the user prefers to use a custom font type to edit the documents, a font mapping file must be created. Instructions for creating new font files can be found in any of the default font files, or the monotype.com sample in Appendix G.

## Supported Characters

The font definition files map both the Mandatory characters and Optional characters for EIA-608. Refer to the monotype.com Font Definition File in Appendix G. The default folder for the font definition files is **C:\ProCAP\Fonts\EIA-608**. Existing font definition files can be opened with Word.

Special characters can be copied from the font definition file, or inserted from **Insert** → **Symbols** from the main Word menu.

To set a shortcut key assignment, or view any existing assignment, select the character in Word (i.e. select the character in the opened font definition file) and execute **Insert** → **Symbols** from the main Word menu. The selected character is highlighted, with any existing **Shortcut key** assignments listed at the bottom of the

**Symbols** dialog box. Press the **Shortcut Key...** command button to assign a shortcut key to the current symbol.

Use this method to insert Spanish, French, or other Western European accented characters. See the Shortcut Keys summary for accessing the common accented characters.

To caption in a language other than English, a custom keyboard for the desired language may be the most efficient solution. By setting up the proper **Input Locales**, found in **Regional Settings** in the **Control Panel**, the common accented keys are readily available. Execute **T**ools → **L**anguage → **S**et **L**anguage to set the language of the spell checker in Word to match, or set it to automatically detect language based on **Input Locale**.



Smart quotes (the open and close quotes) and smart apostrophes are set to map as optional characters by default. If you don't want them in the caption stream, then you will want to do a search and replace with the standard double or single quotes.

## Subtitling

### Fonts

Any system font can be used to author subtitles. However, it is recommended that a proportional sans-serif font such as Arial be used when creating subtitles.

# The Player

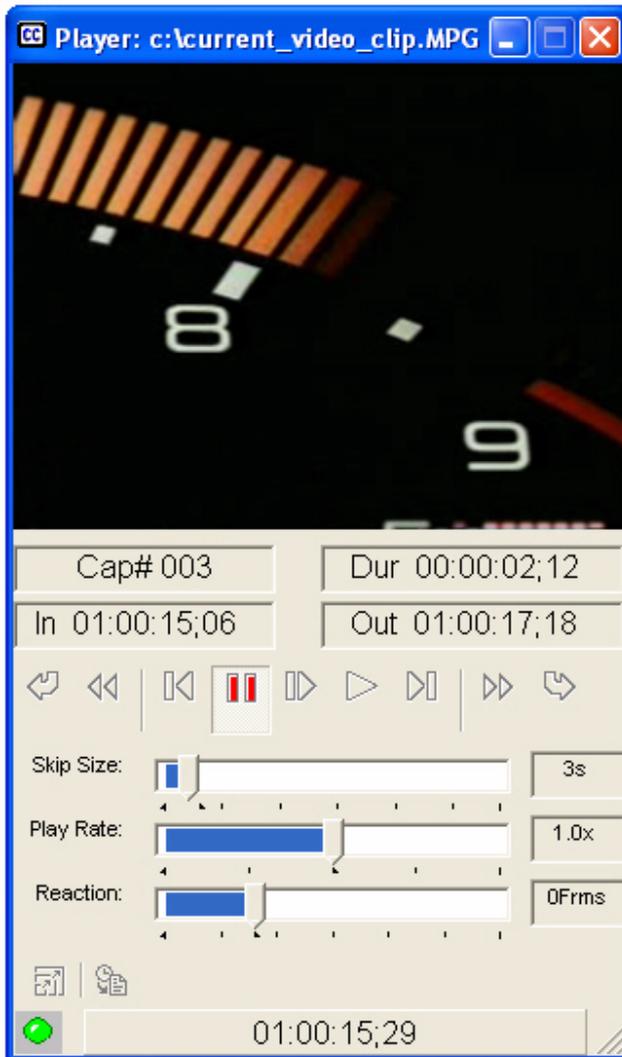
## **The Player**

The Player provides non-linear playback and what you see is what you get (WYSIWYG) preview and control over caption positioning. This allows for verification of the caption display, timing and positioning.

Captioners and transcribers have non-linear, mouse and keyboard control over the playback of the video, play speed, player positioning, and player size. Captions are rendered over the resizable video window to provide full preview capabilities, as well as allowing captioners to drag and position captions over the video with complete row and column accuracy.

Using Microsoft Direct X multimedia system the Player allows captioners to view the video in a window on the screen. The video can be played back in a nonlinear format.

The Player with a clip loaded.



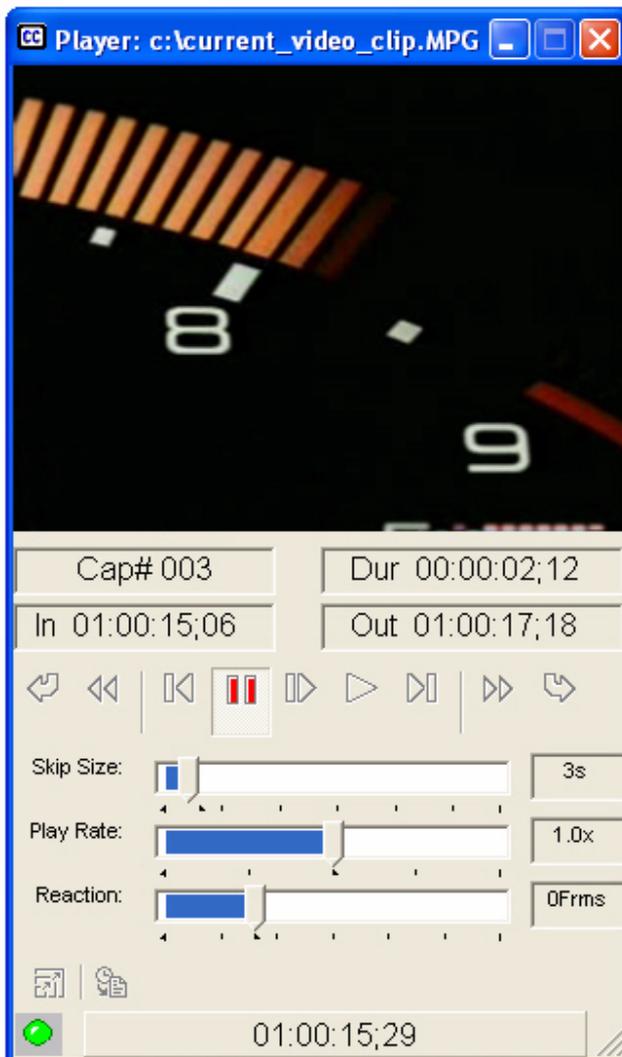
The controls of the Player are mapped to Shortcut Keys.

## Opening a Source Video File

To open the Source Video File in the Player:

- execute **F**ile → **S**ource **C**lip from the Word menu and choose the corresponding video file
- press the **Open Source Clip File**  command button and choose the corresponding video file

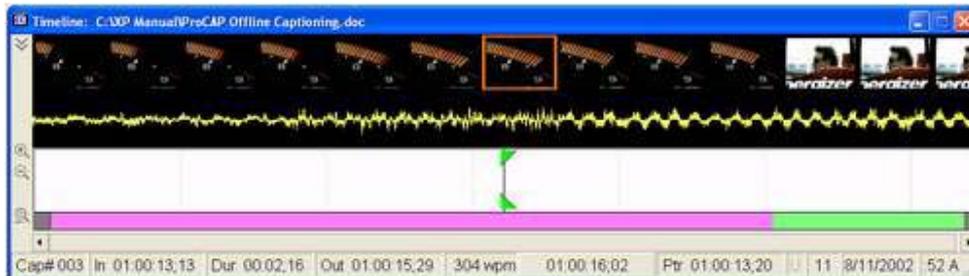
The Player window will open and the video clip will appear in the window.



The status button on the bottom left side of the Player will change from gray to green, indicating that the Player has frame access to the source clip. A red button will indicate that frame access is not available and the video should be recaptured using a different compression codec to ensure frame accurate closed captioning.

Clicking on the status button will toggle the mode of access of the clip by the Player, providing all access modes are available.

A Timeline window will also open.



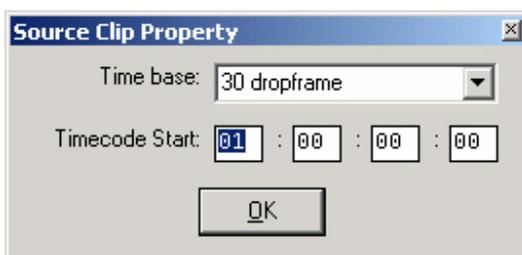
It will be blank other than a filmstrip, an audio waveform and if a list of scene changes has been generated, thin gray bars will appear in the Timeline.

The first time a source clip is opened, the audio extraction process will take place to create separate files for the video thumbnails and audio waveform for displaying on the filmstrip. This process may be cancelled, resulting in the empty filmstrip being hidden. The film strip is currently only viewable on systems running Windows(r) XP.

Refer to the Timeline section for further details on the Timeline.

## Start Time Code of Video

The first time a Source Video File is opened, the following dialog box appears, requesting the user to set the **Time base** and the starting time code (**Timecode Start**) of the clip.



The **start time code** of the Source Video File must be entered. When a Source Video file is first loaded, the start time code needs to be input. This is the time code of the first frame of video. It is necessary to enter the correct time code in the field otherwise the resulting captions will not line up with the video. To change the start time code at a later point, either all the captions must be moved, or the start time code may be changed within the Transfer Utility.

For further information about changing time code:

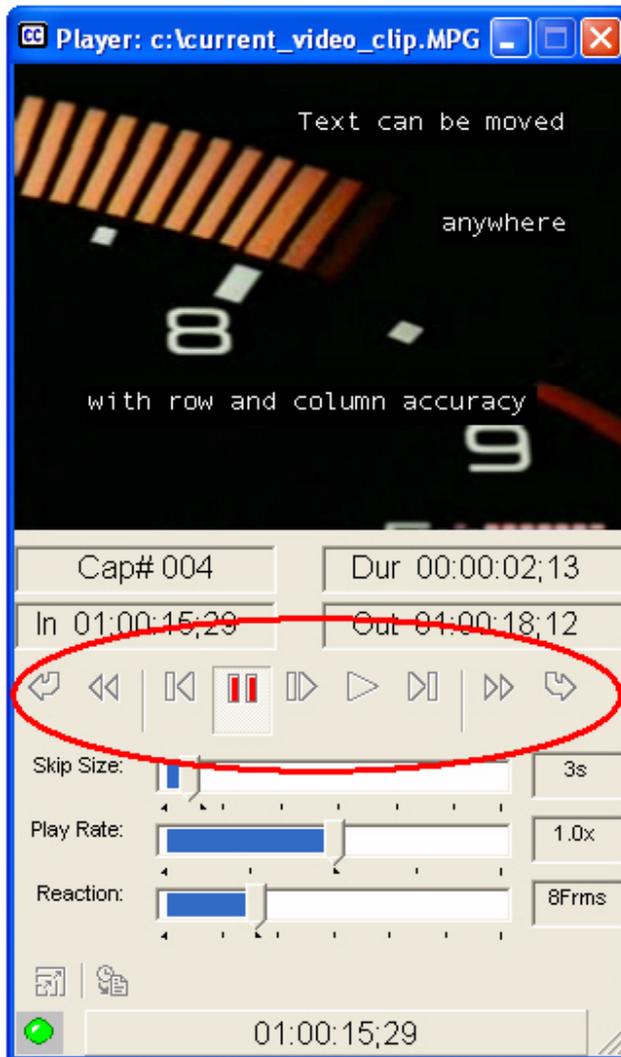
- if the video requires to be offset from the original time code, refer to Moving Captions within the Preview and Editing Captions section
- if the start time code was incorrectly entered and needs to be corrected, refer to the setting time code through Document Properties of User Interface Configuration.
- if the video final master has a different time code at time of encoding refer to Changing Time Code within the Transfer Utility Section

The **Time base** is defaulted to 30-drop frame. In ProCAP Version 1.3, only 30-drop frame and 30-nondrop frame are supported. NTSC video runs at 29.97 frames per second. Drop frame ensures that the time code of the video matches the time on the clock. In non-drop frame, after a period of time, the video time code will be out of sync with time on the clock. Non-drop frame is still used in the captioning industry for short material where time is not an issue. The time base setting will be dependent on the facility set up.

If a Source Video File has been opened to tie to a captioned document, upon opening the Word file under ProCAP, ProCAP will automatically search for the corresponding source clip. If that clip is unavailable, or is no longer in the same directory, a modal error message will appear. The user will need to press **OK** and manually open the source clip.

## Controlling the Player

The Player displays the current Source Video File and allows non-linear control of playback.



The Player controls are available on the Player, through the ProCAP Player toolbar and as Shortcut Keys from the Editor.

 The play state is not affected by use of the skip function. If you are in play mode and select the skip forward, the file will move by the skip size and continue to play; when in pause mode, the will move by the skip size and remain paused.

The main controls on the Player are:

Action	Command Button	Description	Shortcut Key
Start of video clip		Go to start of video clip	Ctrl + Num .
Skip reverse		Skip backward in the Player or Timeline in preset <b>Skip Size</b> amounts.	Num 2
Frame reverse		Move the video within the Player and Timeline back in decrements of one frame.	Num 4
Pause		Pause the video in the Player.	Num 0
Play / Pause		Plays the video from the current position at the a Play Rate of 1. The Play control acts as a toggle between Play and Pause with a configurable pre-roll.	Num 0
Replay		Plays the video from the start of the current caption in the Editor at the set <b>Play Rate</b> . Replay acts as a toggle between Replay and pause with a configurable pre-roll.	Num .
Frame forward		Move the video within the Player and Timeline in increments of one frame.	Num 6
Skip forward		Skip forward in the Player or Timeline in preset <b>Skip Size</b> amounts.	Num 8
End of video clip		Forward the video clip to the last frame of video.	
Slow Play forward		Plays the video from the current position at the set <b>Play Rate</b> . The Play control acts as a toggle between Play and Pause without pre-roll.	Ctrl + Num 0

## Player Status and Secondary Controls

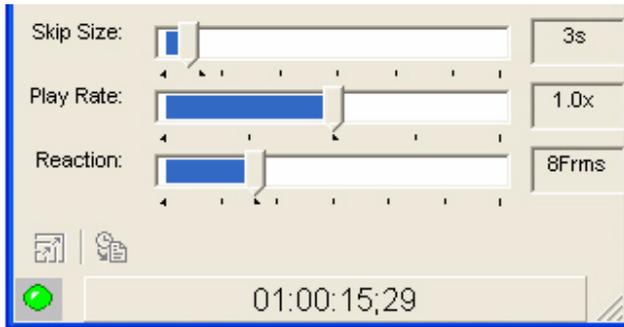
Cap# 004	Dur 00:00:02;13
In 01:00:15;29	Out 01:00:18;12

**Cap #** - current caption number

**Dur** - duration of caption (caption length)

**In** - time code of the caption in-point

**Out** - time code of the caption out-point



**Skip size** - The slide bar sets skip increment and decrement rates. The default skip size can be set from within the current configuration file.

**Play rate** - the slide bar sets to play rate speed at which the video is played during Slow Play Forward.

 To play the video at a slower rate - Slow Play - there is now a dedicated shortcut key to support Play/Pause at the current Play Rate set on the Player. Normal Play/Pause now is always at a the normal Play Rate of 1.0. In addition, Slow Play always updates the Player Timeline as it Plays. Player Timeline updates are optional for Normal Play, and can be enabled through Tools->ProCAP Configuration->User Interface.

**Reaction** - when assigning caption in-points and out-points while the video is playing, the reaction time amount set will be deducted form all the in-point and out-point time codes.



**Change player size** - will change the size of the Player.



**Go to caption** - moves the cursor within the Editor to the caption closest in to the current Player position.

A green **Player Status**  light signifies that the Player has direct frame access to the clip. The compression codec used to create the clip is a supported codec that provides frame access. This is the only method of guaranteeing frame accurate time code placement of captions.

A gray **Player Status**  light indicates that no video clip is loaded.

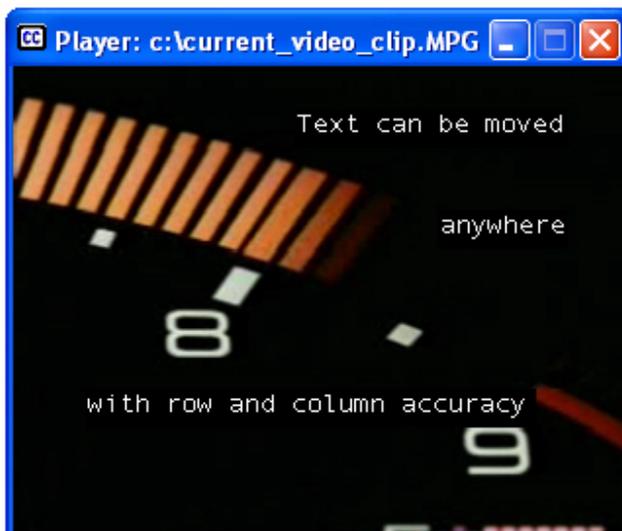
A red **Player Status**  light signifies that the Player has time access to the clip but not frame access. The compression codec used to create the clip is an unsupported codec, and only provides time access. Using a compatible

compression codec is the only method of guaranteeing frame accurate time code placement of the captions. Although this clip can be used, frame accuracy is not guaranteed. It is recommended that the source clip be recaptured using a supported codec.

The time code shown indicates the current play position.

## Mouse Action In The Player

When the caption is displayed on the Player, the right mouse button can be used to drag the caption into position (WYSIWYG). If the **Ctrl** key is held, the caption lines can be separated and the rows moved independently. Dragging the caption is done with row and column accuracy.

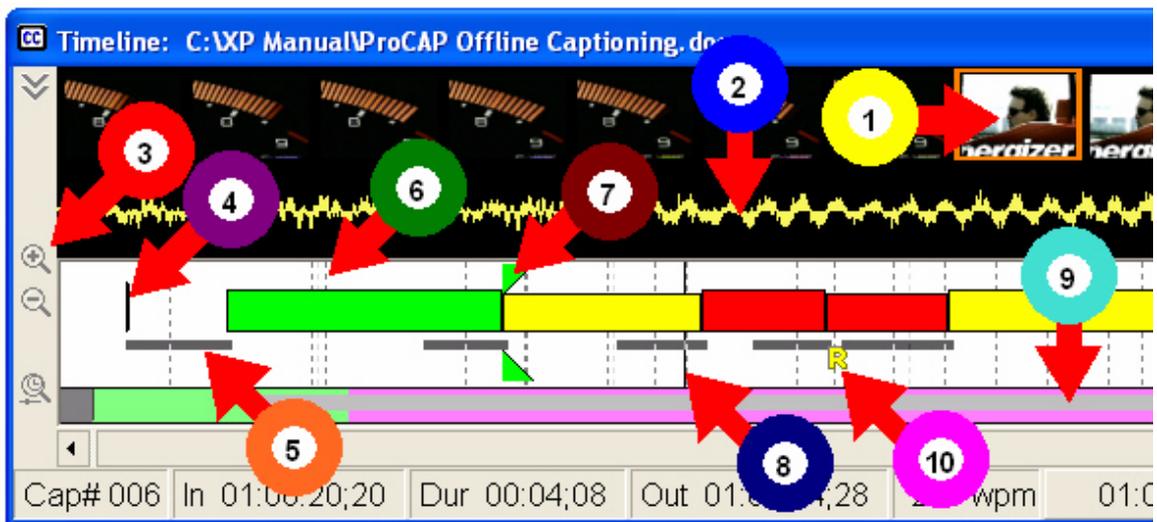


💡 Play and Pause will also work as a toggle by clicking on the Player screen.

💡 Captions will be updated automatically to be viewed on the Player. To manually update all the captions on the Player, press the **Verify Caption**  command button or execute **Ctrl + N**.

## **The Timeline**

## The Timeline



The Timeline provides a pictorial view of the caption information, offering the user an overview of, and access to, the entire project.

The entire Source Video File can be quickly navigated from the Timeline summary. The Timeline allows direct access to the current Player Source Video Frame, and adjustment of the in-points and out-points of captions.

**1 Filmstrip** - the filmstrip provides a pictorial summary of the adjacent video frames to the current frame displayed in the player. This can be used to visually identify scene changes without searching frame by frame through the Player. The current frame displayed on the Player is highlighted by a red box.

**2 Audio Waveform** - The audio waveform helps to visually identify on which video frames audio events change.

**3 Timeline controls** - These control the pictorial representation of the caption information and Timeline Summary. **Show / Hide Filmstrip**   shows or hides the filmstrip and audio waveform on the Timeline. **Zoom In**  doubles the viewed length of captions. **Zoom Out**  halves the viewed length of captions. **Timeline Summary Zoom**  changes Timeline Summary span from length of current Source Video File up to 24 hour view.

**4 Start Captioning Marker** - until the Start Captioning Marker, the encoder will be passing all existing captions. At the marker, any existing captions on the screen will be cleared, and only the captions that follow will be inserted. Similarly, at the end of the captioned file, a Stop Captioning Marker will put the encoder back into a transparent state whereby all existing captions will be allowed to pass through.

**5 Transmission Bars** - upon creation of captions, ProCAP verifies that the captions will properly encode to video. The gray bars underneath the captions represent the transmission data that is required to be encoded into video so that the captions can be rendered as displayed at the appropriate time. If the transmission data from two captions overlap to occupy the same frames of video, the caption information will not get properly encoded to the video and the conflicting caption will be lost. The transmission bars will turn red to signify this transmission conflict. At this time, the conflict should be corrected. If the default error correction has not been disabled, ProCAP will invoke the Push to Previous macro and automatically correct the transmission conflict error.

**6 Scene change bars** - denote scene changes. After capturing a video file, scene changes may be generated. These will be denoted as broken grey lines on the Timeline.

**7 Current Caption Marker** - this symbol follows the current caption in the Editor. It is green when there are no transmission conflicts between the current caption and the previous. This symbol turns red when the transmission data for the current caption overlaps and conflicts with that of the previous. For further information about transmission conflicts refer to the Caption Transmission Conflict section.

**8 Current Player Position** - often referred to as the **Playbar**, this bar indicated the current position of the Player. The time code of the Playbar is displayed on the status bar of the Timeline.

**9 Timeline summary** - this is an overview of the Timeline. The Timeline summary shows the entire Source Video File that has been loaded. The area shaded green represents the loaded Source Video File. The area shaded magenta represents the portion of the Source Video File currently being viewed in the Timeline. The areas shaded gray indicate where captions have been created.

**10 Error reporting** - errors are reported under the caption in which the error is generated. Errors are reported as follows:

Error Code	Caption Error	Error Description	Error Correction
<b>C</b>	unmapped characters present	The font character has no mapping to EIA-608 output characters	Replace character with a mapped character or add the unmapped character to font file
<b>D</b>	below minimum duration	Caption duration is less than the minimum specified in the current configuration file	Auto-fix will increase duration of caption (or can be done manually)
<b>F</b>	font error	Unmapped or Mixed fonts in current caption	Change the characters in the caption that are unmapped to a supported font
<b>I</b>	in-point conflict	More than one caption exists with the same in-point	Move one of the captions to a new in-point
<b>K</b>	cropped error	Current caption has cropped text on specified line	Insert line breaks
<b>L</b>	excessive lines in caption	The current caption has more lines than the target number of lines specified in the current configuration file	Auto-fix will split the caption into the correct number of lines (or can be done manually)
<b>O</b>	optional character in column 32	The character in column 32 is an EIA-608 optional character which is not supported by current decoders	The optional character must be moved from column 32
<b>P</b>	Position change error	The caption has change in position and /or justification with previous	Auto-fix will make the position the same as the previous caption
<b>R</b>	exceeding maximum reading	Caption duration is too short for the	Auto-fix will increase duration

	rate	length of the caption	of caption (or can be done manually)
<b>T</b>	truncation	The current caption has more lines than can be displayed at once	Auto-fix will split the caption into the correct number of lines (or can be done manually)
<b>U</b>	unloaded captions	ProCAP does not recognize the caption	Verify that time code is assigned to captions. Manually correct any errors or stop and re-start ProCAP
<b>W</b>	word wrap	The caption has been auto-wrapped to more than one line	Ignore to accept current line breaks or manually correct using Shift + Enter to insert line breaks
<b>X</b>	transmission conflict	Current caption overlaps with the previous	Auto-fix will delay the in-point of the current caption by the number of frames required to remove the conflict
<b>Z</b>	optional character	There is an EIA-608 optional character in column 32	The caption must be re-worded or line breaks changed to remove the character from line 32.

The **Colored Bars within the Timeline** pictorially represent the captions. The various colors depict caption reading rates.

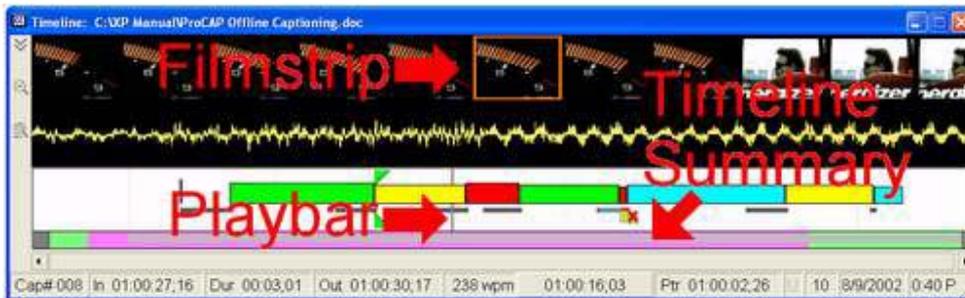
The **Status Bar of the Timeline** displays status information along the bottom of the Timeline. Based on the current caption that is highlighted in the Editor, that is, the caption in the Editor where the cursor is, the information displayed, in order is:

- current caption number
- caption in-point

- duration of the caption
- caption out-point
- reading rate of the caption
- current time code of the Player position
- the time code of the mouse position
- current date
- current time

## Navigating through the Timeline

The mouse is used to move within the Timeline. Captionists can move the current Player position, adjust timecode (in-points and out-points), scroll through the video using the Filmstrip, make timecode adjustments using the Audio Waveform and find frames in the video using the Timeline Summary.



### To move the video or move within the video:

Mouse Action	Result
Clicking with the left mouse button	Position the Playbar to the frame within the video. If the video is playing, it will first be paused
Clicking with the right mouse button	Play / Pause video toggle
Dragging the Playbar with the left mouse	Move the Playbar

### To move using the filmstrip

Mouse Action	Result
Click on the desired frame in the filmstrip	Position that frame to the current position in the Player

### Mouse Actions over a Caption on the Timeline

Mouse Action	Result
Double-Clicking with the left mouse button	Updates the caption transmission information, redisplay the caption and reports any errors
Clicking with the left mouse button	Move the caption, move its in-point, or move its

	out-point. The current player position follows all activity
Clicking with the right mouse button	Move the caption, move its in-point, or move its out-point. The current player position is unaffected
Moving mouse over a Caption	Updates the transmission information for the selected caption and updates the status bar

### Mouse Actions over the Timeline Summary

Mouse	Action
Clicking with the left mouse button	Move the current player position to that of the next caption
Clicking with the right mouse button	Move the current player position to the selected frame

**The scroll bar below the Timeline Summary** can be used to scroll through the Timeline:

- the left mouse button on the arrows on either end of the scroll bar, results in a small movements
- the left mouse button on the empty part of the scroll bar results in full screen/page movements
- the left mouse button dragging the scroll bar dynamically moves the Timeline
- the green area in the Timeline Summary corresponds to the entire Source Video File
- the purple area in the Timeline Summary corresponds to the portion of the Source Video File which is currently displayed by the Timeline

Note: moving the scroll bar does not affect the current Player position

### Command Buttons on Timeline

Command Button	Action
Zoom In 	Doubles the viewed length of captions
Zoom Out 	Halves the viewed length of captions
Timeline Summary Zoom	Changes Timeline Summary

	span from length of current Source Video File up to 24 hour view
Show / Hide Filmstrip  	Show or hide the Filmstrip on the Timeline

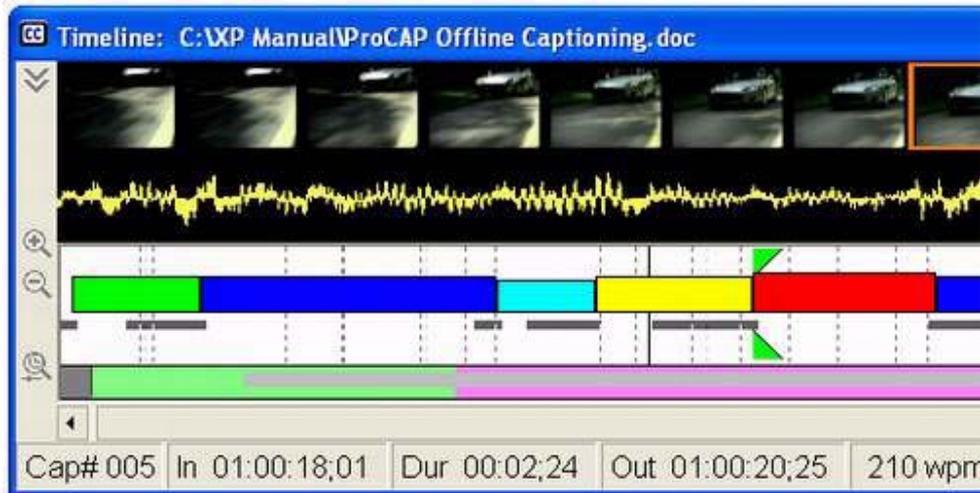
### **Editing timecode in the Timeline**

In-points and out-points can be edited within the Timeline using the cursor. For more information, refer to Editing Timecode in the Timeline section of the manual.

For further information about navigating or editing caption time code within the Timeline refer to the Timeline section of the manual.

- The Timeline
- Navigating through the Timeline
- Caption Reading Rates
- Editing Timecode in the Timeline

## Caption Reading Rates



The colored bars within the Timeline pictorially represent the captions. They are color-coded to represent the respective reading rates. The reading rate is strictly a function of the number of characters in the caption, divided by the number of characters in a word, divided by the duration the caption is displayed.

Color	Default Reading Rate
Cyan 	0 - 99 words per minute (WPM)
Blue 	100 - 149 WPM
Green 	150 - 199 WPM
Yellow 	200 - 249 WPM
Red 	250+ WPM

The reading rate will be either taken from the starting caption or from the default that has been set. This default can be changed for individual captions by moving the caption bars that are shown in the Timeline window. Grabbing the end of the bar with the mouse, and moving it out or in will change the reading length of the captions.

To change the default reading rates, refer to the ProCAP configuration file.

 Depending on the audience, caption reading rates may vary. Children's shows, for example, require a much slower reading rate, than comedy shows. Since

captioners are able to pictorially see reading rates by colors, ensuring that viewers will be able to see captions for a minimum duration of time, is easy and fast.

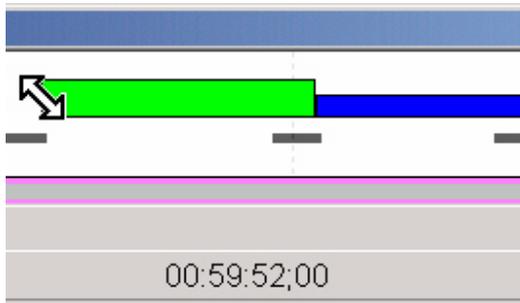
## Editing Timecode in the Timeline

When the cursor is over a caption and the mouse applied, the cursor will change pictorially and the following actions will occur:

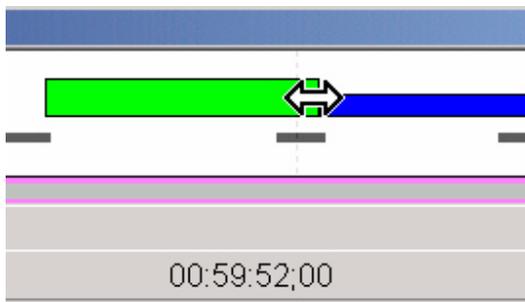
Cursor Description	Cursor Display	Action
Sizeall cursor	↕↔	Caption will be moved
East-west sizing cursor	↔	Caption out-point will be modified
Northwest-south east cursor	↖↗	Caption in-point will be modified

In-points and out-points can be edited within the Timeline, by moving the start, middle, or end of the caption. Use the left mouse button to drag the caption and have the video follow. Use the right mouse button to drag the caption without affecting the current video position.

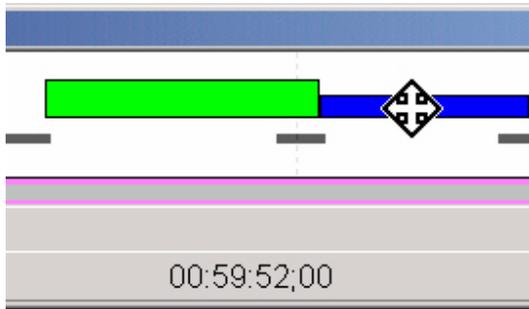
Drag the front of a caption bar to change the in-point.



Drag the end of a caption bar to change the out-point.



Alternatively, drag the middle of the caption to move the caption and maintain its duration.



## **Anatomy of a Caption**

## Anatomy of a Caption

Creating captions involves when and where a caption is displayed on the screen and what it looks like.

This can be done on a caption-by-caption basis, or in blocks of captions. How a user chooses to set the time code is based on whether a transcript already exists of the video and user preferences.

### How do I set a caption?

Captions are created by setting in-points and out-points. These tell the decoder when the caption should be displayed, how long it should be displayed for and if it should clear off the screen prior to the next caption appearing. To learn how to set in-points and out-points refer to the Creating Captions.

### What can I set?

While the decoder determines the font and the font size that will ultimately be shown on the television screen, captioners have the ability to set other attributes. The following attributes can be set by the captionist:

- italics
- underline
- flash (blinking captions)
- text color
- background color (optional support)
- justification of the text within the caption
- position of the caption on the screen
- splitting caption lines on the screen

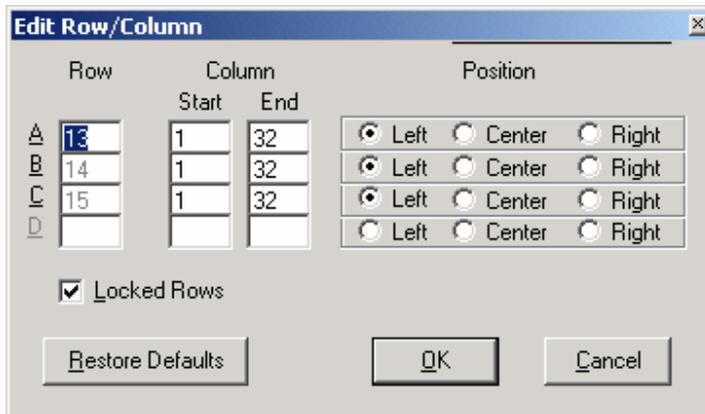
### How do I set the caption attributes?

Caption attributes are set within ProCAP similar to methods used within Word. For example, to make text italic, highlight the text and press the italic icon  or use the shortcut key (**Ctrl + I**), just as you would within a regular Word document. For further information on caption attributes refer to Attribute Hierarchy of a Caption or the online Word Help manual.

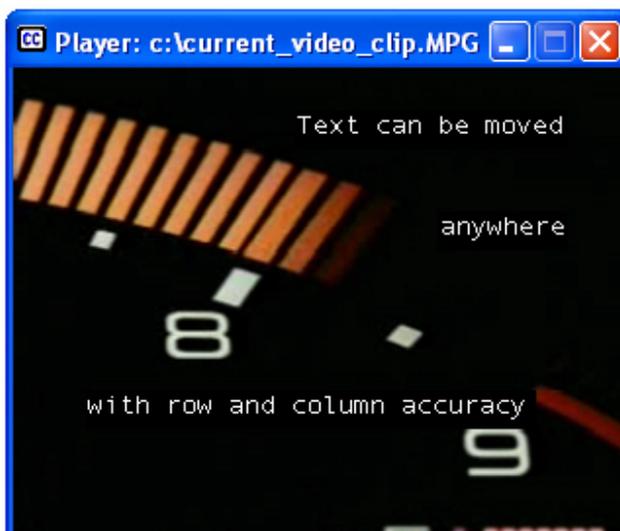
### How do I change the position of the caption on the screen?

As a general rule, pop-on captions are displayed in the center on the bottom of the screen. Where there are two speakers, captions are often moved or split to be closest to the speaker. If the caption is going to hide something important on the screen, then the caption should be moved to another place on the screen. It should be noted that moving the captions too much too often makes them harder to read.

Positioning captions can be done to set the row and column of all lines independently in the caption with complete accuracy.

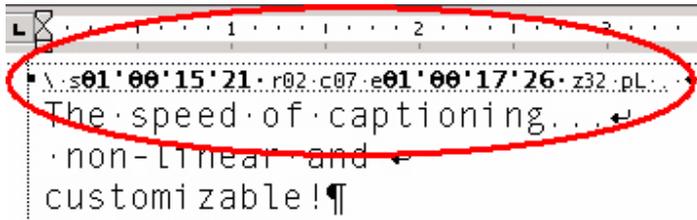


Alternatively, within the Player, using the right mouse button, the caption can be dragged to the desired position on the screen. Pressing the Control key while using the right mouse button allows individual lines to be moved and positioned.



### What is the preamble?

The caption information is stored within the Word document above every caption in the caption preamble.



## Transmission Data

Caption information is transmitted prior to the transmission of the caption in Pop-on, or with the caption display in Roll-up and Paint-on. The only limitation for how close captions can be to one another is the amount of time required for all the transmission data to pass through to the decoder. Transmission data is shown on the Timeline.

## Caption Styles and Conventions

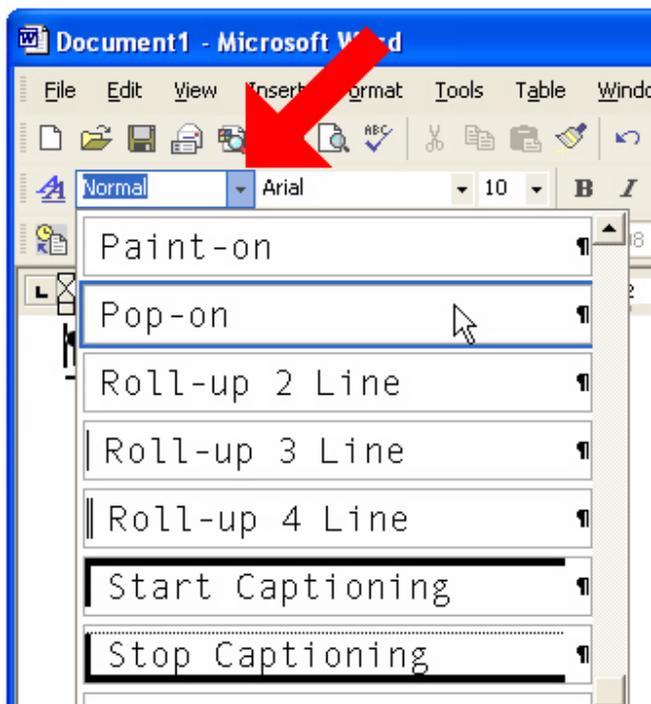
To set a captioning style for existing captions or text, block select the captions that need to be set (or Ctrl + A to select the entire document) and apply the desired style from the Style menu.

To set a captioning style prior to entering text in the document, open the Style menu and chose a captioning style. The bars to the left of the document denote the individual caption's style.

### Closed Captioning

There are three captioning styles: pop-on, roll-up and paint-on. Roll-up is available as 2 line, 3 line or 4 line.

All captioning styles are available from the Style Menu on the Word Formatting toolbar.



The style chosen is often a user preference but conventions are outlined below.

### Pop-on

Pop-on is the most common captioning style. Pop-on captions appear completed at once on the screen. They disappear when the next caption comes on the screen. Common convention suggests that the captions are generally paced in the bottom center. If they would hide something of importance, then they are positioned elsewhere on the screen so as to not be obtrusive to the viewer. The

captions usually are displayed in the same position, for ease of viewing. When there are two speakers and it is not clear who is speaking, the captions are usually placed closer to the current speaker. This format is popular for previously programmed shows, where there is more time for accurate off-line caption placement and timing.

## Paint-on

Paint-on 'paints' the new captions onto the screen. It is often used for special effects or for the first caption in a commercial or after a commercial break.

Paint-on captions behave like Pop-on captions and can be placed anywhere independently on the display. Where they differ is that before a Pop-on caption is displayed, its transmission data must be sent to the decoder. Paint-on captions display as the transmission data is sent, just like Roll-up and no additional lead time is required. This property makes them useful at the start of commercials or after a commercial break where a caption must be displayed immediately as the video starts, but can not be sent ahead of time.

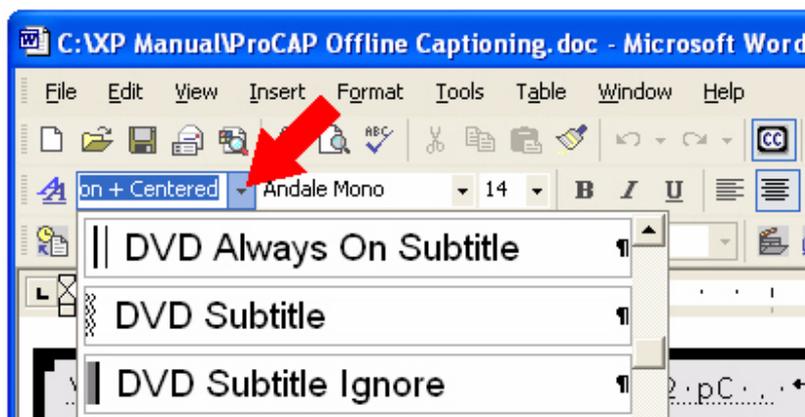
## Roll-up

Roll-up captions are most common for live broadcasts. The captions scroll up and are usually positioned on the bottom of the screen. By convention, speaker changes are indicated with a speaker-change symbol (>> ) and are started on separate lines. Otherwise, all lines are wrapped at the end of the lines, so as to maximize the number of words in each line. Roll-up can either be 2-line, 3-line or 4-line, with 3-line being the most common.

 When a new caption is created, the style is automatically set to be the same as the style of the caption before it. The style that is chosen at the top of the document will be the same throughout the rest of the document, but styles can be changed for specific captions.

## Subtitling

For subtitling, the following cases exists;



**DVD Subtitle** - This the standard style used for subtitles.

**DVD Subtitle Always On** - This subtitle is to be displayed regardless if the user has selected subtitles or not. This is typically used for displaying foreign language audio in a native soundtrack.

**DVD Subtitle Ignored** - This can be used as a placeholder for doing translation scripts to mark captions that are not applicable or do not require translation. This subtitle gets completely ignored.

## Start / Stop Captioning Markers

The **Start** and **Stop Caption Markers** are optional and are used to control the encoder.



These are only used for closed captioning.

These markers are found in the Style Menu within Word.



Until the **Start Captioning Marker**, the encoder will be passing all existing captions. Then at the marker, any existing captions on the screen will be cleared, and only the captions that follow will be inserted.

At the end of the captioning text, a **Stop Captioning Marker** will put the encoder back into a transparent state whereby all existing captions will be allowed to pass through.

Time code must be assigned to both of these special captions.

If no **Start Captioning Markers** or **Stop Captioning Markers** are placed in a caption file, then the Transfer Utility assumes that there is a single **Start Captioning Marker** at the beginning of the transfer file.

### How to assign the Start and Stop Captioning markers

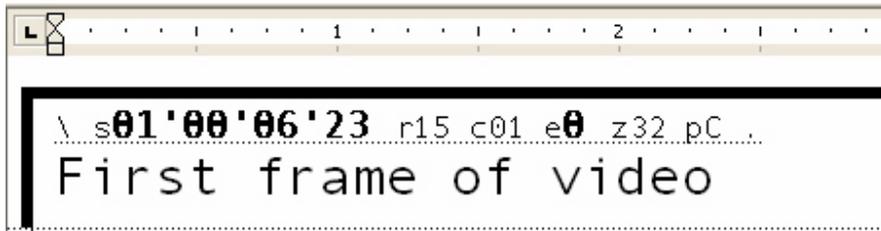
At the top of the transcript, insert a blank line and set a **Start Captioning Marker** in place of the current captioning style.

At the end of the transcript, after the final line of text, insert a **Stop Captioning Marker**.

The caption body of a **Start** or **Stop Captioning Marker** is treated as a comment and passed through to the Transfer file as such, so you can use this as a video reference point for verifying that the master source at time of encoding is the same time code as what was captioned to.

For example, in the **Start Captioning Marker** the user could comment what frame has been chosen as the start of captioning point, for example, first frame of video,

or first frame of slate, or first frame of a scene change.



When the file is encoded to video, the operator encoding the file can check that the first frame of video on the master video is the same time code as what the Captionist used. If there is a difference or a change is required, the operator can make that change easily within the Transfer Utility, without having to verify that all the captions line up with the audio further into the captioned file.

In the **Stop Captioning Marker** caption body, the user should comment what frame has been chosen as the stop captioning point, for example, last frame of video, or first frame of black.



These markers are also useful to include around commercials. Placing a **Stop Captioning Marker** at the end of the segment prior to a commercial and a **Start Captioning Marker** after the end of the commercial will ensure that existing commercial captions between these markers are maintained and that they do not remain on the display into the start of the program material being captioned.

## Caption Preamble

The caption preamble contains all the information pertaining to that caption.



The caption preamble is hidden text which can be shown or hidden by:

- executing **View** → **Caption Preambles** from the main Word menu.
- pressing the **Caption Preamble Show/Hide Toggle**  command button on the ProCAP toolbar.
- executing the shortcut key **Ctrl + Shift = X**.

At a minimum the Caption Preamble will contain the following information:

- s = start time code (in-point)
- r = row
- c = start column
- e = end time code (out-point)
- z = end column
- p = position (L = left, C = center, R= right)
- i = ignore error
  - D = ignore minimum duration error
  - E = ignore empty caption
  - H = ignore hold time
  - J = ignore justification change
  - M = ignore position / justification mismatch
  - P = ignore position change
  - R = ignore reading rate
  - S = ignore safe title exceeded
  - T = ignore truncation
  - W = ignore word wrap
  - X = ignore excessive lines

If the caption has more than one independent line of text, the information will be separated by apostrophes.

 When performing global search and replaces, it is recommended that the captionist hides the caption preamble to avoid replacing important caption preamble information.

 Since all the captioning information is saved within the preamble of the captions, saving and archiving a copy of the Word file will ensure that all caption information is stored for future editing purposes. This also works for copy and paste in reusing sections of captions for introductions, or assembling multiple segments together that were created in parallel for a rush job.

 If the Show/Hide All ¶ (paragraph) button is depressed, caption header information is automatically displayed and cannot be hidden, until the ¶ button is released.

## Joined Captions

When a caption's out-point is 0 or has the same time as the next caption's in-point, it is called a joined caption. By changing the in-point of the next caption, the out-point of the current caption moves as well. There is no distinct out-point time code given for the caption, it simply ends where the next caption's in-point begins.

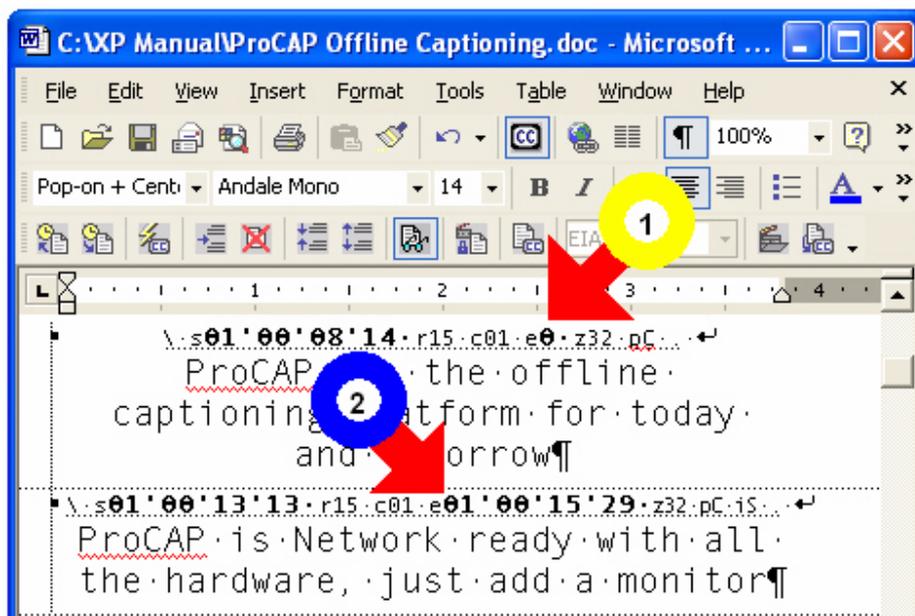
A Separated Caption is a caption that has a distinct in-point and/or a distinct out-point. It does not rely on the next caption's in-point and/or previous caption's out-point.

You can see the difference between a joined caption and a broken caption, both in the preamble of the caption and on the Timeline. The joined caption preamble should have an entry **e0** for an out-point of 0, that indicates there is no out-point. On the Timeline, the box that represents the caption is butted up to the next caption. A Separated caption preamble should have an out-point with a complete time code. On the Timeline, the box that represents the caption should end before the next caption, showing a break in the captioning where no captions will be displayed.

## Separated Captions

A Separated caption is a caption that has a distinct, or separated, in-point and/or a distinct out-point. Changing the next caption's in-point will not change the out-point of the current caption.

The diagram below shows preambles for two captions, a broken caption and a joined caption.



1 A joined caption with the caption preamble showing the out-point being **e0** as the caption does not have its own out-point, but is joined to the next caption in-point.

2 A separated caption with the caption preamble showing an entry for the out-point.

## **Attribute Hierarchy of a Caption**

Attribute hierarchy is set by EIA-608 and is invisible to the user. ProCAP handles the details of the hierarchy and inserts spaces where it must to. Most attributes are implemented with mid-row codes that are spacing commands - that is, the decoder recognizes and processes them, and replaces them with a space in the data stream.

ProCAP inserts spaces into the caption file as required to achieve the attributes specified. For example, if a single line Pop-on caption is created on bottom center and italicized, then on update, a space will be inserted as the first character of the caption. The space is required to send the EIA-608 command to turn italics on for the following caption text. Up to three spaces may be needed and inserted if most or all of the different attributes are applied together.

For further information refer to Setting Caption Attributes.

## Justification

Caption justification should not be confused with Caption Positioning. The two are independent, though setting position will set a default justification.

The Position of the caption determines where the longest line of the caption is displayed. Justification determines where the remaining shorter lines of the caption are displayed relative to the longest line.

Justification sets how the text is aligned within itself at the given position.

Justification includes left, center, and right. You can choose justification through the Formatting Toolbar in Word.

To Justify	Toolbar	Example
Left		ProCAP offers flexibility, is fully configurable, and customizable.
Center		ProCAP offers flexibility, is fully configurable, and customizable.
Right		ProCAP offers flexibility, is fully configurable, and customizable.

Refer to the Default Justification and Positioning section of the manual for additional information regarding default justification and position.

## Positioning

The screen is made up of 32 columns of text by 15 lines. A caption can be placed anywhere on the screen within those parameters.

EIA-608 defines three captioning styles: Pop-on, paint-on and roll-up; 2 line, 3 line and 4 line. Each style has a default position assigned to it. The default properties for the styles are defined in the **eia608.dot** ProCAP template and the current configuration file. Roll-up and paint-on default the caption position to be the bottom left of the screen, whereas pop-on defaults to the bottom center.

When in Preview Mode, captions can be positioned on the Player screen, by dragging the caption with the right mouse button to the desired location over the video. For pop-on and paint-on, grabbing the caption will move the entire caption. For roll-up, only the last line, or base line, can be repositioned on the screen.

Multiple line captions may also be split on the Player screen by holding down any of the modifier keys, that is, the **Ctrl**, **Alt**, or **Shift** key and dragging the specific line with the right mouse button.

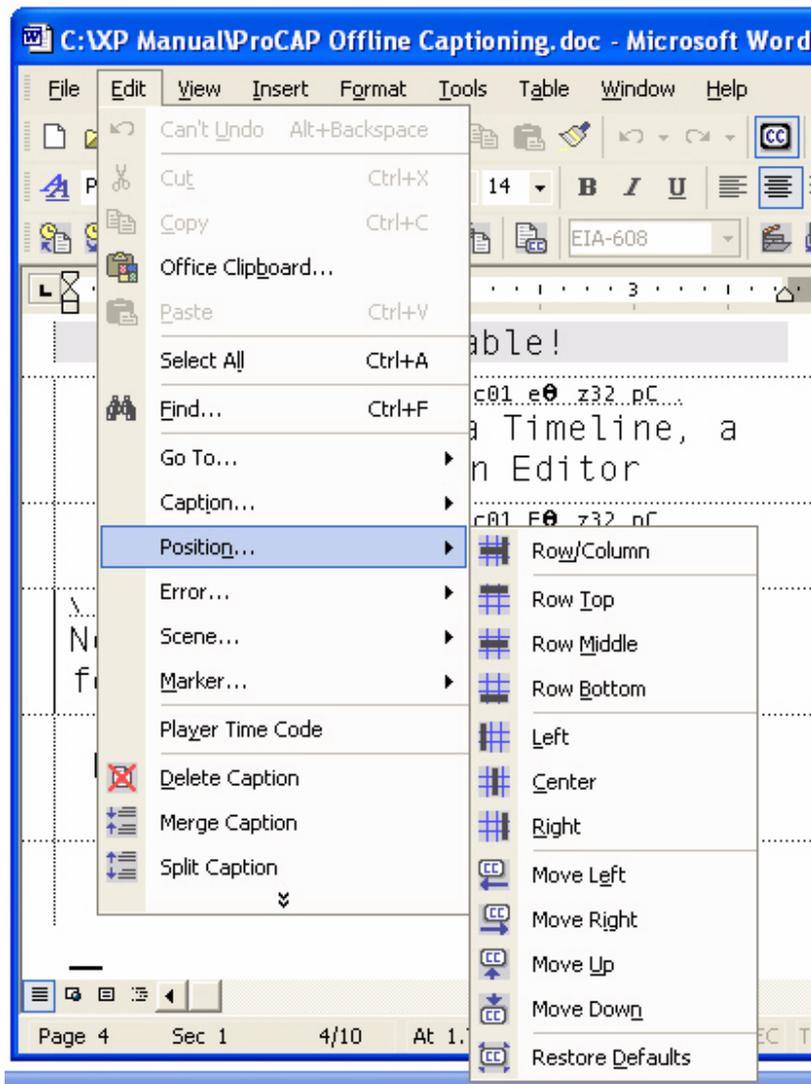
Caption justification should not be confused with Caption positioning. The two are independent, though setting position will set a default justification.

The Position of the caption determines where the longest line of the caption is displayed. Justification determines where the remaining shorter lines of the caption are displayed relative to the longest line.



When a caption is created, that is the caption header is created; the positioning information will be the same as the positioning information for the caption before it.

To change the positions of the captions within the Editor, execute **Edit** → **Position** from the main Word menu:



## Positioning Information in the Caption Preamble

Captions may have lines that are in-dependent of one another, or locked together.

The positioning information appears in the caption preamble.

For example, the following caption preamble information represents a four-line caption, where all the lines are locked together:

```
\ s01'00'15'16 r15 c01 e01'00'18'24 z32 pR .
```

The Caption record contains the following information:

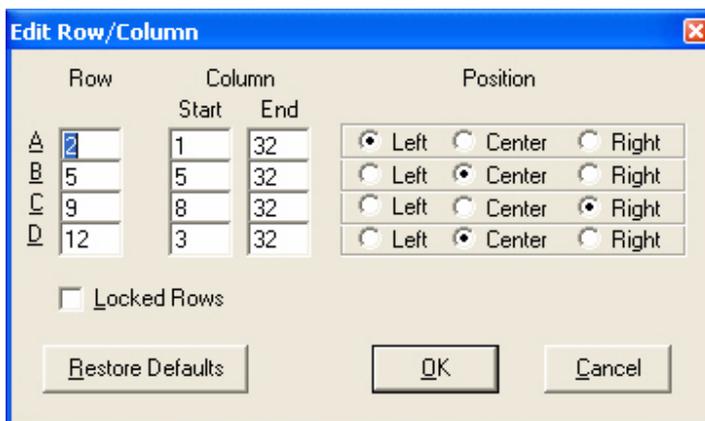
- s = start time code (in-point)
- r = start row

- c = start column
- e = end time code (out-point)
- z = end column
- p = position (L = left, C = center, R= right)

For this caption, the preamble information will translate to:

Start time code = 01:00:15:16  
 Caption start row = 15  
 Caption start column = 1  
 Caption end time code = 01:00:18:24  
 Caption end column = 32  
 Caption position = right

To change the caption line information, the user executes **Edit** → **P**osition → **R**ow/**C**olumn.



Within the form, the user can change the row and column information for the given caption. The **Locked Rows** selector should be unchecked if the user wishes to make the individual lines independent.

Upon making the above changes, press **OK** and the caption preamble information will change to the following:

\ s01'00'15'16 r02'05'09'12 c01'05'08'03 e01'00'18'24 z32'32'32'32 pL'C'R'C .

The individual caption information is separated by apostrophes. In the above example, the first line of the four-line caption will start on row 2. The second line will start on row 5, the third line will start on row 9 and the last line of the caption will start on row 12.

Users may also change the header information manually to adjust time code and caption positioning, although this practice is not recommended. It is very prone to

errors and ProCAP only provides general error reporting.

## Vertical positioning

Caption rows allow the user to set either the row of the first, or last line of a caption. For pop-on and paint-on, the set row will be the first line of the caption. For roll-up, the set row will be the bottom line, or base line, of the caption. If the user sets the row to be off the screen, ProCAP will adjust the setting so that the text will not be lost. For example, in a four-line pop-on caption with the row set to be 15, ProCAP will adjust the row to be 12 to allow the all lines of the caption to be viewed on the screen. Quick selects are available through the menu and shortcut keys to provide top, middle, bottom, row up, and row down positioning. The middle row is user definable within the current configuration file.

## Horizontal positioning

There are up to 4 variables that can to be used to set horizontal positioning:

1. Start column
2. End column
3. Position
4. Justification

Start column and end column define the valid columns that a caption can be positioned in. The caption will be displayed within and including the columns specified. The default columns are set at start column = 1, end column = 32, so that the entire width of the screen is used.

There are two cases that will be discussed below - all the lines of a caption are together or the lines of a caption are separated on the screen.

When all the lines of a caption are together, the start and end columns are usually the same for the entire caption.

For example, the following caption header information represents a four-line caption, when the lines are locked together.

```
\ s01'00'15'16 r15 c01 e01'00'18'24 z32 pR .
```

If the lines are separated, then there will be a start and end column for each line, and they will be separated within the caption header by apostrophes.

```
\ s01'00'15'16 r02'05'09'12 c01'05'08'03 e01'00'18'24 z32'32'32'32 pL'C'R'C .
```

Either dragging the captions on the Player, or calling up the **Edit** → **Position** → **Row/Column** menu can change the information.

## Position and Justification

Positioning determines where the caption box is positioned. The caption text will be positioned within a caption box. The longest line in the caption determines the width of the caption box and the number of lines in the caption determines height of the caption box.

If **Edit** → **Position** → **Left** is executed, then the caption box is positioned so that the start column of the caption box is the Start column of the caption.

If **Edit** → **Position** → **Center** is executed, then the caption box is positioned so that it is centered between the Start and End columns of the caption.

If **Edit** → **Position** → **Right** is executed, then the caption box is positioned so that the end column of the caption box is the End column of the caption.

Justification is only applicable when all the lines are kept together. Justification determines how the lines are justified with one another within the caption box. They are justified within the caption box with respect to the longest line. You can justify the lines of the caption within the box so that the captions are justified to the left, justified in the center or justified on the right.

## Positioning Examples:

### Example 1

The caption file is a four-line file that will be captioned using pop-on.

Start column = 2  
End column = 7  
Positioning = Right  
Justification = Left

Caption text:

A  
AB  
ABC  
ABCD

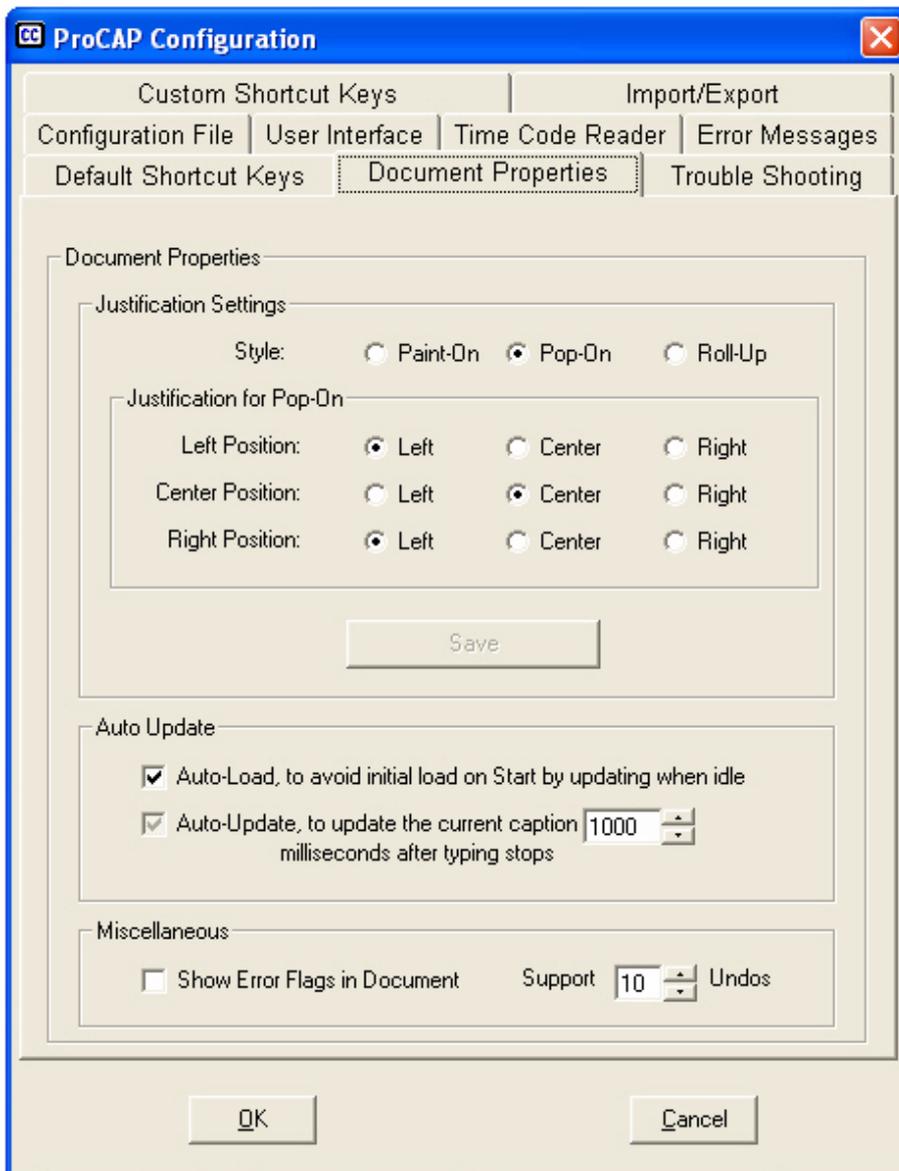
.....	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	.....
Row 11								
Row 12				A				
Row 13				A	B			
Row 14				A	B	C		
Row 15				A	B	C	D	



Row 12	A							
Row 13	A	B						
Row 14	A	B	C					
Row 15	A	B	C	D	E	F	G	

## Default Justification and Positioning

For each captioning style (Paint-On, Pop-On, Roll-Up), the default justification for position is set in the ProCAP configuration. To edit the defaults, execute **Tools** → **ProCAP Configuration** → **Document Tab**.



The values that are changed are saved with the current document and are restored the next time the document is opened.

## **Creating Captions**

## Starting with a Blank Document

The steps involved in creating a captioning file from a blank document are as follows:

1. Create a new caption file - start by opening Word
2. Start ProCAP
3. Open Source Video File
4. Chose a Caption Style
5. Transcribing the audio using one of the following methods:
  - transcribe the text while setting in-points and out-points interactively
  - using the Player to set in-points and out-points of captions while transcribing the audio
  - transcribe the text then set in-points and out-points
  - can use any of the above in conjunction with Auto-Time / Auto-Split
6. Verify the captions
  - adjust in-points and out-points of the captions
  - adjust caption positioning
7. Create a transfer file

### Transcribing the audio

As captions are created, they can be previewed on the Player.

Using the Player control keys, or the shortcut keys, the captionist can move in a non-linear fashion within the video to start playing the Source Video File and transcribing the text to create captions.

The following methods for transcribing are described as complete passes, without going into hints and tips for verifying the captions. Most of these methods can be combined with the methods of Previewing and Editing the captions simultaneously (for maximum efficiency), or in segments, based on captionist preference.

There are many different methods of transcribing text to create captions - four common methods are outlined below.

#### **Method 1: Setting In-points and Creating Captions While Transcribing.**

In this method, transcribing the audio is interleaved with setting caption in-points.

Using the keyboard short cut keys, the process will be:

1. find the video frame corresponding to the start of the next caption
2. create a new caption by setting a new in-point (**Ctrl + Enter**)
3. start the Player (**Num 0**)
4. listen to the audio

- start and stop the video **Num 0**
  - skip backward to re-listen to the video **Num 2**
  - frame forward **Num 6**
  - frame backward **Num 4**
  - skip forward **Num 8**
  - stop and replay the caption **Num .**
5. stop the Player (**Num 0**)
    - stopping the Player at the desired in-point of the next caption saves time
  6. type in the caption text
  7. if the next caption immediately follows the current, go to **Step 2** to start the next caption
  8. otherwise, set the out-point of the caption (**Num -**)
  9. go to **Step 1** to start the next caption

 This method gives the user a captioned text file in one pass, allowing for immediate adjustments of time codes to match in-points and out-points to the exact frames required.

 Positioning of captions can be done simultaneously as captions are displayed on the Player as captions are created.

### **Method 2: Using the Player to Set In-Points and Create Captions While Transcribing**

This method is similar to Method 1, but the Play / Pause action of the Player is used to set caption in-points and out-points.

With Player macros enabled, the Play/Pause command (**Num 0**) does more than just play and pause the video:

- On Play:
  - If the current Player position is greater than or equal to the out-point of the current caption, then a new caption and in-point is created.
- Video is started
- On Pause:
  - Video is paused
  - Always sets the out-point of the current caption to the current Player position.

Skipping back (**Num 2**) or replaying a caption (**Num .**) will not create a new caption or change any in-points. However, the out-point of the current caption will always be reset to the current Player position when the Player is paused.

Play/Pause is used to create empty captions where gaps in the captions are desired. All of the blank captions can be removed when done using a single blank caption delete command.

Using the Player control keys, the process will be:

1. enable Player macros (**Ctrl + Alt + Num 0**) so that the **Player Macros**  icon is visible on the bottom of the Player
2. start the Player (**Num 0**) to create a new caption at the current Player position
3. listen to the audio
  - **Num 2** can be used to skip back to re-listen to the audio
  - **Num .** can be used to stop and re-play the caption
4. stop the Player (**Num 0**) to set the end of the caption to the current Player position
5. type in the caption text
  - leave the caption blank to have no captions displayed
6. go to **Step 2** to start the next caption

 This method gives the user a captioned text file in one pass, allowing for immediate adjustments of time codes to match in-points and out-points to the exact frames required.

 Pressing the **Verify Caption** icon, will automatically disable the Player Macros as ProCAP assumes that the captionist will be fixing errors, and will want to use **Num 0** to start and stop the video as opposed to using that key to modify caption in-points and out-points.

To re-enable the Player Macros press **Ctrl + Alt + Num 0**.

### **Method 3: Transcribing First, Followed by Creating Captions**

This method uses two passes to create a captioned text file.

The captionist will listen to the Source video clip and transcribe the audio, or import a completed transcript, and break the text into captions with the **Enter** key in the first pass.

 When transcribing text, to move to a new line within the caption, captionists generally use **Shift + Enter** (soft-return) and to move to a new caption **Enter** (hard return). To use these keystrokes, ensure that the **Enable Enter Key Remap to New Line in Caption** is disabled (this is found in **Tools** → **ProCAP Configurations** → **Default Shortcut Keys**).

 Ensure that the Player macros are disabled (**Ctrl + Alt + Num 0**) while using this method.

The second pass, usually done in real-time, is used to create the captions.

Start playing at the beginning of the Source Video File. While listening to the video, and without stopping the Player, set the in-point (**Ctrl + Enter**) of the next caption when it should be displayed. This will move to the next caption in Word, only if the current caption already has an in-point, and set the in-point (and create the caption as required) of the caption to the current Player position. The out-point of the previous caption will also be set to the current Player position. So unless there is a break in the audio that requires all captions to be cleared from the screen, this is all that needs to be done.

To remove a caption from the screen, set its out-point (**Num -**). Again, this can be done in real time as the Source Video File is playing.



This method provides proficient typists with the ability to quickly transcribe the text and then caption the file with minimum keystrokes.

#### **Method 4: Auto-Split**

This method uses one pass to create a captioned text file, and is a modification of Method 1. It is best suited for advanced captioning.

As in Method 1, the captionist will create captions as they listen and transcribe the audio. Where this differs is that for sections in the audio where there is no scene change, or where the speaker speaks continuously without break, rather than create small captions, the captionist will transcribe all the audio into one caption, not worrying about the length of the caption (i.e. 2 line or 3 line).

Once there is a break in speakers or a scene change, the captionist will highlight that caption and execute Auto-Split (**Ctrl + Q**) on that caption. This will automatically break that section into smaller captions.



This method provides proficient typists with the ability to quickly transcribe the text and then caption the file the quickest.



Disable Player macros (**Ctrl + Alt + Num 0**) while using this method.

For information on how to create captions when starting from a transcribed document, refer to Starting with an Imported Transcript within the Creating Captions Section.

## Starting with an Imported Transcript

The steps involved in creating a caption file from an imported transcript are as follows:

1. Open the Transcript file
2. Start ProCAP
3. Open Source Video File
4. Chose a Caption Style
5. Creating Captions
  - Break text up into captions using the **Enter** key for next captions, and **Shift + Enter** for new lines within a caption.
  - Set in-points and out-points in real-times
  - Or use Auto-Split
6. Verify the captions
  - adjust in-points and out-points of the captions
  - adjust caption positioning
7. Create a transfer file

## Transcript Sources

The transcript can be created one of four ways:

- Import an existing transcript
- Create a new transcript from the video in the player
- Use Via Voice ® to dictate the transcript
- Import an existing caption file

If a transcript file has already been created, open or import the file.

If no transcript file exists, execute **File** → **New** and choose the eia608.dot template to base the new caption document on.

The eia608 template contains the eia608 style definitions and ProCAP shortcut keys. For files that are imported that are not native Word documents, ProCAP will prompt you to save it as a native Word document so that no caption information will be lost. Page sizes and margins will be set at that time.



It is recommended that the desired ProCAP captioning style and/or Default Paragraph Font be applied to imported transcripts. This will convert the transcript text into the correct font for proper mapping by ProCAP.



Smart quotes (the open and close quotes) and smart apostrophes map as optional characters. If you don't want them in the caption stream, then you will want to do a search and replace with the standard double or single quotes. To

ensure that the smart quotes are not mapped as optional characters and the dash (-) is not mapped as an em-dash, users should turn off AutoText in Word, prior to creating or editing caption material. Execute Insert ® AutoText ® AutoText. Under AutoFormat As You Type and AutoFormat the following should be turned off: "Straight quotes" with "smart quotes" and Symbol characters (--) with symbols (-).

## Auto-Time / Auto-Split

Auto-Time distributes all captions evenly, according to reading rate, across the current selection within the document.

Auto-Split breaks up multi-line captions into captions with the target number of lines.

These functions are best suited for advanced roll-up captioning.

### Using Auto-Time to Redistribute Existing Captions

Block select the range of captions to be auto-timed. Execute auto-time (**Num +**). Auto-time will loop through all of the captions within the current selection and redistribute the display times of the captions to maintain a consistent reading rate. Locked in-points and out-points are unaffected.

By default, the in-point of the first caption in the block selection and the out-point of the last caption in the block selection are used to bound the auto-time operation, and will not be changed. Alternatively, the Timeline Marker and the current Player position can be used to override the auto-time start and end boundaries respectively.

### Using Auto-Time to Create Captions

The captionist will listen to the Source Video file, transcribe the audio, and break the text into captions with the **Enter** key in the first pass.



When transcribing text, to move to a new line within the caption, captionists generally use **Shift + Enter** (soft-return) and to move to a new caption **Enter** (hard return). To use these keystrokes, ensure that the **Enable Enter Key Remap to New Line in Caption** is disabled (this is found in **Tools** → **ProCAP Configurations** → **Default Shortcut Keys**).

Additionally, caption in-points or out-points are assigned at important times, such as scene changes, where gaps in the captioning are required, change of speaker, etc... After captions have been created at these important times, the key time is locked: **Ctrl + Num 1** is used to lock an in-point, and **Ctrl + Num 3** is used to lock an out-point. The locked times will not be changed by any of the common commands.

The in-point of the first caption and the out-point of the last caption must be created and set, as a minimum, before proceeding to the second pass.

The second pass now consists of block selecting the entire document, and executing auto-time (**Num +**). Auto-time will distribute all of the captions (and create them as required) to maintain a consistent reading rate across all of the captions, while maintaining all of the important (locked) caption in-points and out-points previously set.



This method provides proficient typists with the ability to quickly transcribe the text and then caption the file the quickest.

## Using Auto-Split to Break Up a Caption

Select the caption or range of captions to auto-split. Execute Auto-Split (**Ctrl + Q**),

Auto-Split breaks up multi-line captions into captions with the target number of lines. The captions are auto-timed to create a consistent reading rate, bounded by the in-point and out-point of the original caption.

Entire paragraphs of dialog, possibly from an imported transcript, can be captioned quickly with auto-split.

Auto-split is an advanced form of Split.



The number of lines that the caption will be split into is set in the configuration file. ex: for pop-on, captions will be split into 2 lines. The number of lines can be changed by editing the ProCAP configuration file.

## Transcript Conventions

A hard carriage return (**Enter**) signifies a new line within a caption.



When transcribing text, to move to a new line within the caption, captionists generally use **Shift + Enter** (soft-return) and to move to a new caption **Enter** (hard return). To use these keystrokes, ensure that the **Enable Enter Key Remap to New Line in Caption** is disabled (this is found in **Tools** → **ProCAP Configurations** → **Default Shortcut Keys**).

Each EIA-608 caption line can only hold a maximum of 32 characters. By default, Word is configured to display 32 columns and the captions are set to use all available characters. If there are more than 32 characters on a given line, ProCAP will automatically word-wrap them exactly how they have been word-wrapped and displayed by Word.

Within the ProCAP document using a non-proportional font such as monotype.com will allow the captioner to preview how the text will appear on the screen by seeing how the text is in Word.

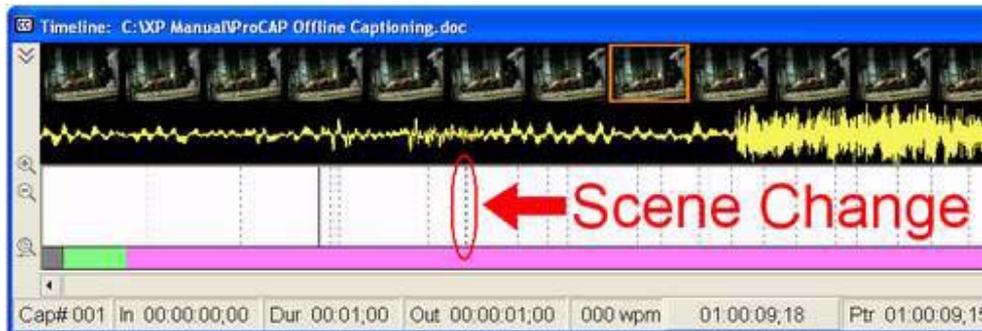
Changing the start and end columns of the caption will change where the automatic word-wrap splits the lines for the caption, even though the display in Word does not change.

Applying the Caption Style from the eia608.dot style template to the transcript prior to importing a document or creating a transcript, will ensure that the fonts is mapped correctly

## Scene Changes

If a scene change list has been made prior to opening the video in ProCAP, when the Source Video File is opened, the scene changes are imported.

Visually, the scene changes are displayed as broken grey lines on the Timeline.



When captions are being created, the default action is to snap to the closest scene change when the in-point of the new caption is within the **snap to scene change** window as defined by the current Configuration File. For example: the default window for a pop-on caption is 30 frames.

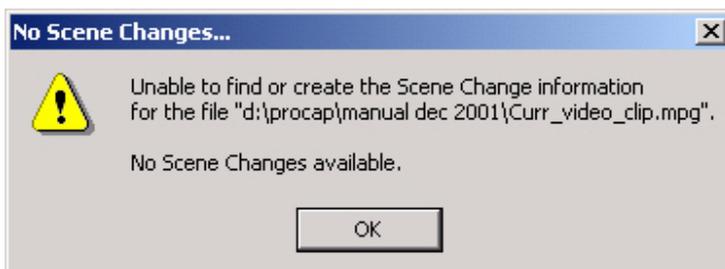
To override this and reposition the caption to the current player position, execute **Num +** again to override this.

To disable the **snap to scene change**, in the Configuration File, set the frame window to 0.

To set the Player position to the next scene change execute **Num 9** and **Num 7** will go to the previous scene change.

To manually add a scene change execute **Ctrl + Num 7**. To delete a scene change execute **Ctrl + Num 9**.

 Upon opening the Source Video File, if the following box appears:



a scene change list has not been found.

## Enable Player Macros

Users can also Enable Player Macros, to be run the Player/Pause controls that allows the user to have the Player Play and Pause commands create captions and set the in-points and out-points during the transcription process.

To enable this function, users execute **Tools** → **ProCAP Configuration** → **User Interface** and select **Enable Player Macros, To Be Run By Play/Pause**, or shortcut key **Ctrl + Alt + Num 0**.

The Player Macros shortcut key is an enable/disable toggle.

The **Player Macros**  icon is visible on the bottom of the Player when enabled.



Every time the user presses **Play**, the macro **BeforePlay** is invoked (**EditCaptionEmptyInPoint** by default). When the user presses **Pause**, the macro **AfterPause** is invoked (**EditCaptionOutPoint** by default). The macros executed are specified in the current configuration file.

 Entering Preview Mode automatically disables the Player Macros as a safety mechanism, to prevent unintentional modification of caption display times during editing. Use the Player Macros (**Ctrl + Alt + Num 0**) shortcut key to re-enable as required.

## Setting Time Code in Real Time

To assign time code to the captions as the video plays through in real time, use the **Ctrl + Enter** or **Num Enter** Shortcut Key to assign time code to the current caption, or if the caption already has time code assigned to it, skip to the next caption and assign a current time code position to the next caption.

The cursor in the Editor should be on the first caption to be assigned.

Starting at the top of the document, the first item to set is the time code for the optional Start of Captioning Marker. This will be on a blank line in the document and have an in-point set that corresponds to where the captions start. Position the video to the first frame of video, or another known reference frame in video.

Start the video. With the focus on the Editor, and the cursor in the body of the first caption, in this case the Start of Captioning Marker set a caption in-point by using the default shortcut key **Num Enter** .

**Num Enter** is the default shortcut key for **EditCaptionNextInPointNoJoin**. This does one of two things. Executing **Num Enter** checks if a current caption exists. If a current caption does exist the cursor will move to the next caption (like **Ctrl + Down**) and perform an **EditCaptionInPointNoJoin**. If the current caption does not exist, then the shortcut key **Num Enter** will execute an **EditCaptionInPointNoJoin** on that current caption.

The user will continue to listen to the audio and using **Num Enter** set all the in-points of the captions. As in-points are assigned, if the user knows how long a caption should stay on the screen, or when it should be cleared off the screen, out-points can also be assigned at the same time, using the Shortcut Key **Num -**. The user can then continue with **Num Enter** to set the remainder of the caption in-points. Also, users may use **Num +** to set in-points and move to the next caption.

Note: the definition of a caption is text that has a caption header and is loaded by ProCAP. If there is no caption header, then the text is merely a paragraph within Word.

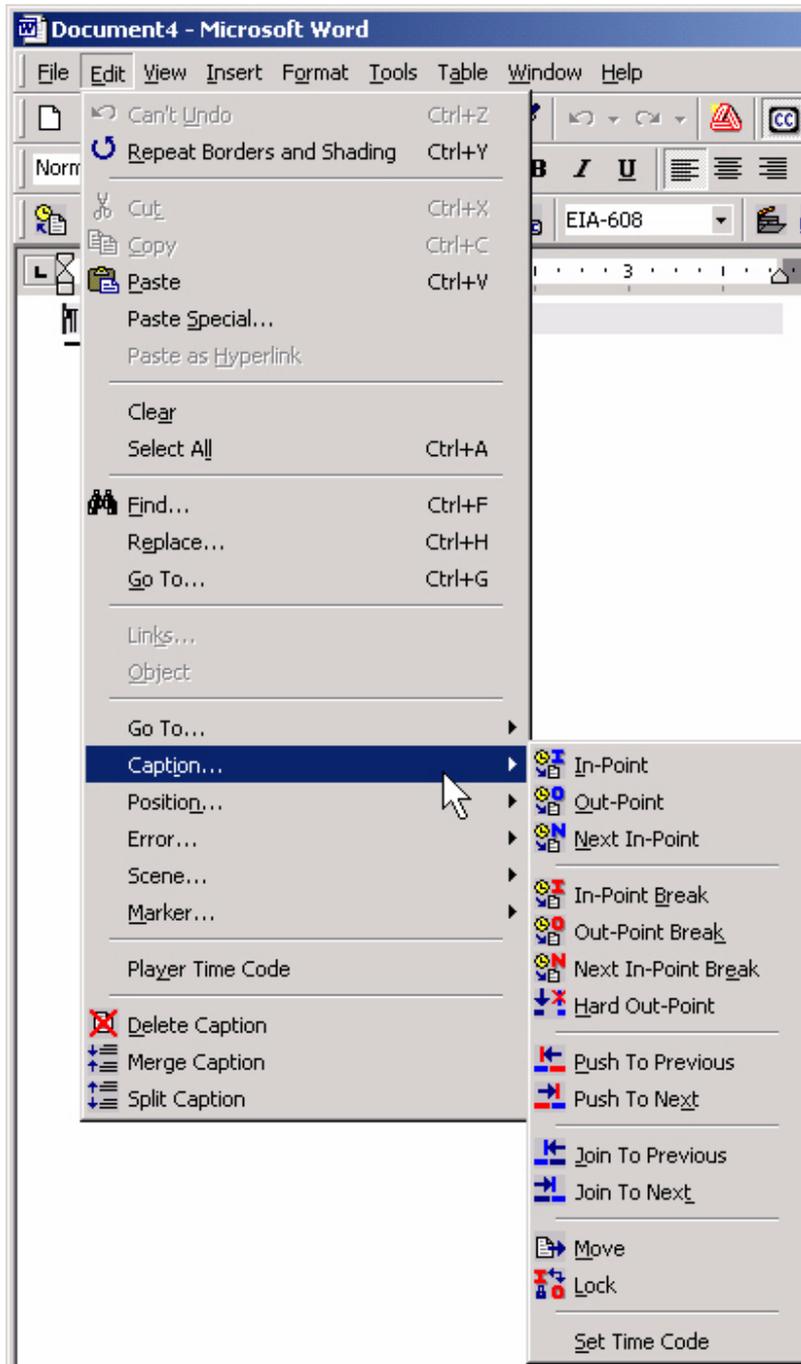
Users wishing to change the shortcut key, or how it works, can do so by executing **Tools** → **Customize** → **Keyboard** → **Categories: Macros**, then chose the **Macros** to assign a Current Key to. Ensure that when changes to the Shortcut Keys are made, the file designated for Save changes in: is set to eia608.dot. Ensure that a Word file is open and ProCAP is running prior to making any changes to the keyboard shortcut keys.

## **Shortcut Keys versus Timeline for Editing**

## Editing Caption Time Code with Shortcut Keys

Within the Editor, captions can be edited, in-points and out-points set and changed, captions can be moved and row and columns can be changed, using the Word menus, the ProCAP toolbar, or shortcut keys.

Using the Player, move to the desired frame in video. Notice that the Playbar and the Timeline are positioned at the same video frame point. Position the cursor in the caption that is to be adjusted, or block select a range of captions, and execute the desired function using either the shortcut key or the **Edit** → **Captions** menu entry. This will set or change desired attribute of the caption or the range of captions. Functions that do not operate on a range of captions include out-point, next in-point, and set time code.



Default Shortcut Keys:

Icon	Menu Location: Edit → Caption →	Default Shortcut Keys	Description
	In-Point	Num+ Alt + I	Sets the In-Point of the current caption in Word, and the Out-Point of the previous, to the current Player position. Performs an Auto-Time if a range of

			captions is selected.
	<u>Out-Point</u>	<b>Num-Alt + O</b>	Sets the Out-Point of the current caption in Word, and the In-Point of the next, to the current Player position.
	<u>Next In-Point</u>	<b>Ctrl + Enter</b>	Sets the In-Point of the next caption in Word, and the Out-Point of the current, to the current Player Position, and advances to the next caption to make it the current. Works exactly like <u>In-Point</u> if the current caption has not been created yet.
	<u>In-Point Break</u>	<b>Shift + Num+ Alt + Shift + I</b>	Same as <u>In-Point</u> , except breaks from the Out-Point of the previous caption.
	<u>Out-Point Break</u>	<b>Shift + Num -Alt + Shift + O</b>	Same as <u>Out-Point</u> , except breaks from the In-Point of the next caption.
	<u>Hard Out-Point</u>	<b>Ctrl + Shift + Num - Alt + H</b>	Toggles the Out-Point of the current caption to be a Hard Out-Point, that will not be ignored if within the ignore window of the In-Point of the next caption.
	<u>Push To Previous</u>	<b>Ctrl + Shift + Num * Alt + P</b> <b>Ctrl + Shift + Num / Alt + Shift + P</b>	Moves the In-Point of the current caption as close as possible to the previous caption, without generating a conflict.
	<u>Push to Next</u>	<b>Ctrl + Shift + Num / Alt + Shift + P</b>	Moves the In-Point of the current caption as close as possible to the next caption, without generating a conflict.
	<u>Join to Previous</u>	<b>Ctrl + Num / Alt + Shift + J</b>	Joins the In-Point of the current caption with the Out-Point of the previous caption, by setting the In-Point equal to the Out-Point.
	<u>Joint to Next</u>	<b>Ctrl + Num * Alt + J</b>	Joins the Out-Point of the current caption with the In-Point of the next caption, by setting the Out-Point equal to the In-Point.
	<u>Move</u>	<b>Ctrl + M</b>	Moves the In-Point of the current caption in Word to the current Player position. If a range of captions are selected, then the first caption is moved as normal, with the remaining being moved by the same offset.
	<u>Lock</u>	<b>Ctrl + Num 1 or Alt + K for In-Point</b> <b>Ctrl + Num 3 or Alt + Shift + K for Out-Point</b>	Locks the In-Point, Out-Point, In-Point and Out-Point of the current caption, or range of captions, from being changed.
	<u>Set Time Code</u>	<b>Ctrl + Shift + M</b>	Edit the current caption In-Point and Out-Point directly in time code.

The current Player and Timeline time code is used when setting caption in-points

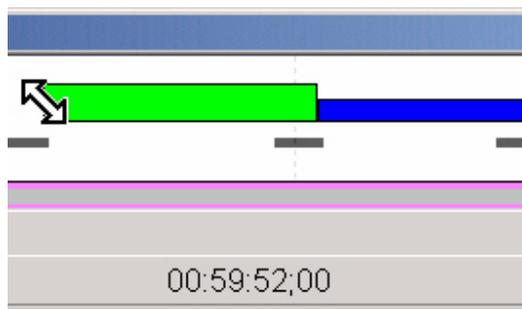
and out-points.

For more information on the interaction between caption In-Points and Out-Points, refer to Masking Captions.

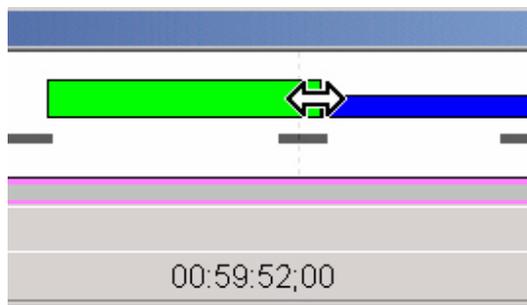
## Editing Caption Time Code within the Timeline

In-points and out-points can be edited within the Timeline, by moving the start, middle, or end of the caption. Use the left mouse button to drag the caption and have the video follow. Use the right mouse button to drag the caption without affecting the current video position.

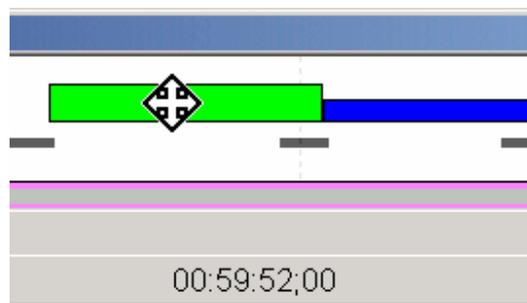
Drag the front of a caption bar to change the in-point and previous joined caption out-point. Press the **Ctrl** key during the operation to break the caption in-point away from the previous joined caption out-point.



Drag the end of a caption bar to change the out-point.



Alternatively, drag the middle of the caption to move the caption and maintain its duration.



## **Preview and Editing Captions**

## Editing Captions

Captions can be created and edited using command buttons or shortcut keys.

For a listing of the ProCAP command buttons refer to the ProCAP Toolbar in Appendix E.

For a listing of the default Shortcut Keys refer to Shortcut Keys in Appendix C.

Captions are displayed over the video in the Player for WYSIWYG preview. Once captions are created, executing Verify Captions, will update all the captions and check for errors.

For further information on editing captions refer to the following topics:

- Deleting Captions
- Inserting Captions
- Joining Captions
- Locking Captions
- Masking Captions
- Merging Captions
- Moving Captions
- Positioning Captions
- Pushing Captions
- Splitting Captions
- Setting Caption Attributes

## What is Verify Captions

Once captions are created, executing **Verify Captions**, will update all the captions and check for errors.

- execute **View** → **Verify Captions** from the Word menu
- press the **Verify Captions**  command button

At the time when the transmission information is created, ProCAP verifies that the captions will be properly encoded to the video. If **Interactive Reporting of Errors** is enabled, captions that have errors will be flagged for the user to examine and correct or select auto corrected by ProCAP. If **Interactive Reporting of Errors** is disabled, then caption errors can be easily located using the shortcut keys **Num \*** to go to the next error and **Num /** to go to the previous error.

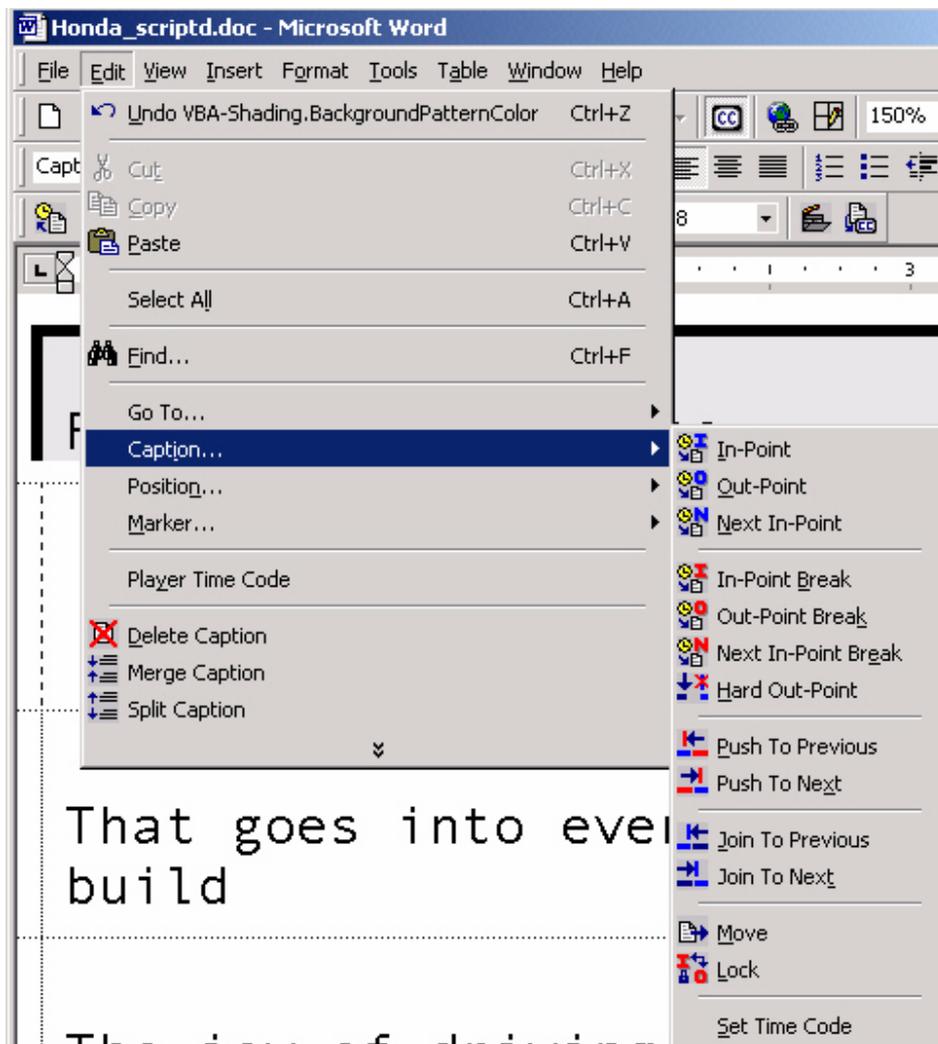
For further information on the warning and errors that are issued within ProCAP Configuration refer to Error Messages within the Configuration Section.

 Typing text will not create captions. Executing a ProCAP operation will create transmission information and allow the user to preview the caption over the video. Executing the Verify Captions, will update all the captions and check for errors.

## Assigning Time Code to Captions

Assigning time code to captions is a matter of selecting the in-points and out-points for the individual captions. The focus should be on the Editor. Caption in-points and out-points can be set using the Word menus, the ProCAP icons, or shortcut keys.

Screen shot of the **Edit** → **Caption** menu.



To use shortcut keys to assign timecode:

Icon	Menu Location	Default Keypad Shortcut Keys Enabled	Alternate keyboard shortcut keys	Description
	<b>Edit</b> → <b>Caption</b> →			

	<b>In-Point</b>	<b>Num +</b>	<b>Alt + I</b>	Sets the In-Point of the current caption in Word, and the Out-Point of the previous, to the current Player position. Performs an Auto-Time if a range of captions is selected.
	<b>Out-Point</b>	<b>Num -</b>	<b>Alt + O</b>	Sets the Out-Point of the current caption in Word, and the In-Point of the next, to the current Player position.
	<b>Next In-Point</b>	<b>Num Enter</b>		Sets the In-Point of the current caption in Word to the current Player position. (If <b>Enable Main Shortcut Keys</b> is turned on, <b>Ctrl + Enter</b> is also mapped).
	<b>In-Point <u>B</u>reak</b>	<b>Shift + Num +</b>	<b>Alt + Shift + I</b>	Same as <u>In-Point</u> , except breaks from the Out-Point of the previous caption.
	<b>Out-Point <u>B</u>reak</b>	<b>Shift + Num -</b>	<b>Alt + Shift + O</b>	Same as <u>Out-Point</u> , except breaks from the In-Point of the next caption.
	<b>Next In-Point <u>B</u>reak</b>	<b>Ctrl + Num Enter</b>		Same as Next In-Point, except breaks from the Out-Point of the current caption. This includes maintaining predicted out-points. (If <b>Enable Main Shortcut Keys</b> is turned on, <b>Ctrl + Shift + Enter</b> is also mapped).
	<b>Hard Out-Point</b>	<b>Ctrl + Shift + Num -</b>	<b>Alt + H</b>	Toggles the Out-Point of the current caption to be a Hard Out-Point, that will not be ignored if within the ignore window of the In-Point of the next caption.
	<b><u>P</u>ush To <u>P</u>revious</b>	<b>Ctrl + Shift + Num /</b>	<b>Alt + P</b>	Moves the In-Point of the current caption as close as possible to the previous caption, without generating a conflict.
	<b><u>P</u>ush to <u>N</u>ext</b>	<b>Ctrl + Shift + Num *</b>	<b>Alt + Shift + P</b>	Moves the In-Point of the current caption as close as possible to the next caption, without generating a conflict.
	<b><u>J</u>oin to <u>P</u>revious</b>	<b>Ctrl + Num /</b>	<b>Alt + Shift + J</b>	Joins the In-Point of the current caption with the Out-Point of the previous caption, by setting the In-Point equal to the Out-Point.
	<b><u>J</u>oint to <u>N</u>ext</b>	<b>Ctrl + Num *</b>	<b>Alt + J</b>	Joins the Out-Point of the current caption with the In-Point of the next caption, by setting the Out-Point equal to the In-Point.
	<b><u>M</u>ove</b>			Moves the In-Point of the current caption in Word to the current Player position. If a range of captions are selected, then the first caption is moved as normal, with the remaining being moved by the

				same offset. (If <b>Enable Main Shortcut Keys</b> is turned on, <b>Ctrl + M</b> is also mapped).
	<b>Lock</b>	<b>Ctrl + Num 1</b> for In-Point  <b>Ctrl + Num 3</b> for Out-Point	<b>Alt + K</b> for In-Point <b>Alt + Shift + K</b> for Out-Point	Locks the In-Point, Out-Point, In-Point and Out-Point of the current caption, or range of captions, from being changed.
	<b>Set Time Code</b>			Edit the current caption In-Point and Out-Point directly in time code. (If <b>Enable Main Shortcut Keys</b> is turned on, <b>Ctrl + Shift + M</b> is also mapped).

 The **Keypad Shortcut Keys** are by default enabled. The **Alternate Shortcut Keys** must be enabled by the captionist by executing **Tools → ProCAP Configuration → Default Shortcut Keys** and checking **Enable Alternative Shortcuts to Numeric Keypad**.

The time code of the current Player position is used when setting caption in-points and out-points.

The **In-Point** and **Out-Point** commands assume that the current caption is to be joined to the previous and/or next caption, and will join the adjacent captions.

The **In-Point Break** and **Out-Point Break** commands assume that the current caption is to be separated from the previous and/or next caption, and will join the adjacent captions.

The default shortcut keys in the above table can be changed to suit user preferences. Users can change the shortcut keys, by executing **Tools → Customize → Keyboard → Macros**, then choosing the Macros to assign a Current Key to. Ensure that when changes to the shortcut keys are made, the file designated for Save changes in: is set to **eia608.dot**. A Word file must be opened and ProCAP must be running prior to making any changes to the keyboard shortcut keys.

## **Editing Caption Time Code**

In-points can be adjusted either from within the Editor using the shortcut keys, or within the Timeline using the mouse.

## Deleting Captions

Captions can be deleted within the Editor by:

- executing **E**dit → **D**elete Caption from the Word menu
- executing the shortcut key **Shift + Del**
- pressing the **Delete the Current Caption or Range of Captions**  command button
- going to the position within the text where the caption should be deleted, triple clicking on the text with the mouse, and executing the **delete** key.

Advanced options are available through shortcuts only:

- executing **Ctrl + Shift + Del** to delete just the caption preambles
- executing **Shift + Backspace** to delete just empty captions

## Inserting Captions

Captions can be inserted within the Editor by:

- executing **I**nsert → **N**ew **C**aption from the Word menu
- pressing the **I**nsert a New Caption  command button
- executing the shortcut key **Shift + Insert**

 The current video position is used to create the in-point for any inserted caption.

## Joining Captions

When a caption's out-point is connected to the next caption's in-point, it is called a joined caption. By changing the in-point of the next caption, the out-point of the current caption moves as well. There is no distinct out-point time code given for the caption, it simply ends where the next caption's in-point begins.

The following commands will join the in-points and out-points of two adjacent captions.

To join the current caption's out-point to the next in-point:

- execute **E**dit → **C**aptions → **J**oin to **N**ext from the Word menu
- execute the shortcut key **Ctrl + Num \***
- execute the shortcut key **Alt + J** (if the alternate keyboard shortcut keys are enabled)

To join the current caption's in-point to the previous out-point:

- execute **E**dit → **C**aptions → **J**oin to **P**revious from the Word menu
- execute the shortcut key **Ctrl + Num /**
- execute the shortcut key **Alt + Shift + J** (if the alternate keyboard shortcut keys are enabled)

## Locking Captions

Locking captions locks the in-point and/or out-point of the current caption in Word so that it can not be changed. If a range of captions is selected and moved, then the locked captions will get moved as normal with the rest of the captions, but the locks will remain intact.

To lock the in-point and/or out-point of a caption:

- execute **E**dit → **C**aption → **L**ock from the Word menu
- press the **Time code Lock between Editor/Timeline**  command button

The above functions all act as toggles between lock and unlock.

Using the keyboard shortcut keys:

To lock the in-point of a caption:

- execute the shortcut key **Ctrl + Num 1**
- execute the shortcut key **Alt + K** (if the alternate keyboard shortcut keys are enabled)

To lock the out-point of a caption:

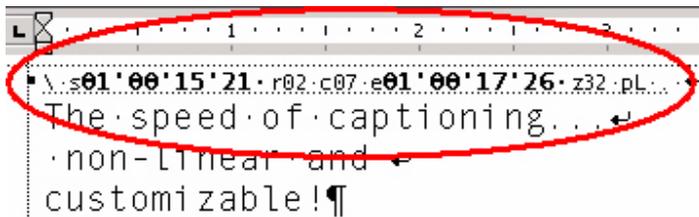
- execute the shortcut key **Ctrl + Num 3**
- execute the shortcut key **Alt + Shift + K** (if the alternate keyboard shortcut keys are enabled)

## Masking Captions

Caption in-points override out-points. This can be seen pictorially within the Timeline. When an in-point has been set, the colored bar that depicts the caption within the Timeline will be a certain length, based on the display duration of the caption. When the next caption in-point is set, it will override any previous caption's overlapping out-point. Captions can be placed very close to one another; the only limiting factor is the caption transmission data. Caption transmission data is what is sent to the Encoder, and is shown on the Timeline as dark gray horizontal bars. The bars will turn red if they are overlapping. This signifies that there is not enough space in the video to transmit all of the information specified.

Normal out-points are masked, or ignored, if they are within 30 frames (the default set in the current configuration file) of the next in-point, or they are beyond the next in-point. A hard out-point can be set by the captionist, that will not be masked if it occurs before the next in-point, regardless of the number of frames prior to the next in-point. The current configuration file setting for Table 2, item 6, **Ignore Out-Points during Next Caption Transmissions**, overrides hard out-points.

Within the caption preamble information, normal out-point time codes are coded as **e**, while hard out-point time codes are coded as **E**.



For example, in the above picture, the caption time code is: **\s01'00'15'21 r02 c07 e01'00'17'26 z32 pL**, the out-point of this caption is at 01:00:17:26. The small **e** indicating that this is not a hard out-point and if the next in-point is either before this outpoint, or within 30 frames of this outpoint, the out-point will be masked.

For further information about caption transmission conflicts refer to the Timeline section.

## Merging Captions

In order to merge captions, highlight the two adjacent captions and:

- execute **Edit** → **Merge Caption** from the Word menu
- execute the shortcut key **Ctrl + W** (if the **Alternative Shortcuts to Numeric Keypad** is enabled)
- press the **Merge the Current Caption with the Next Caption**  command button

The merge will keep the in-point of the first caption as the in-point of the merged caption and take the out-point of the last caption to be merged as the out-point of the merged caption.

## Moving Captions

To move a caption:

- execute **E**dit → **C**aptions → **M**ove from the Word menu
- execute the shortcut key **Ctrl + M** (if the **Alternative Shortcuts to Numeric Keypad** is enabled)

This action moves the In-Point of the current caption in Word to the current Player position. If a range of captions is selected, then the first caption is moved as normal, with the remaining being moved by the same time code offset.

A confirmation message must be accepted to execute the move operation.

## Positioning

For **captioning**, the screen is made up of 32 columns of text by 15 lines. A caption can be placed anywhere on the screen within those parameters.

For **subtitling**, the bounded area can be whatever the user determines it to be. To set up the page width, execute **File** → **Page Setup** → **Paper Size** → **Width**.

EIA-608 defines three captioning styles: Pop-on, paint-on and roll-up; 2 line, 3 line and 4 line. Each style has a default position assigned to it. The default properties for the styles are defined in the **eia608.dot** ProCAP template and the current configuration file. Roll-up and paint-on default the caption position to be the bottom left of the screen, whereas pop-on defaults to the bottom center.

Captions can be positioned from within the Editor or the Player.

On the Player screen, drag the caption with the right mouse button to the desired location over the video. For pop-on and paint-on, grabbing the caption will move the entire caption. For roll-up, only the last line, or base line, can be repositioned on the screen.

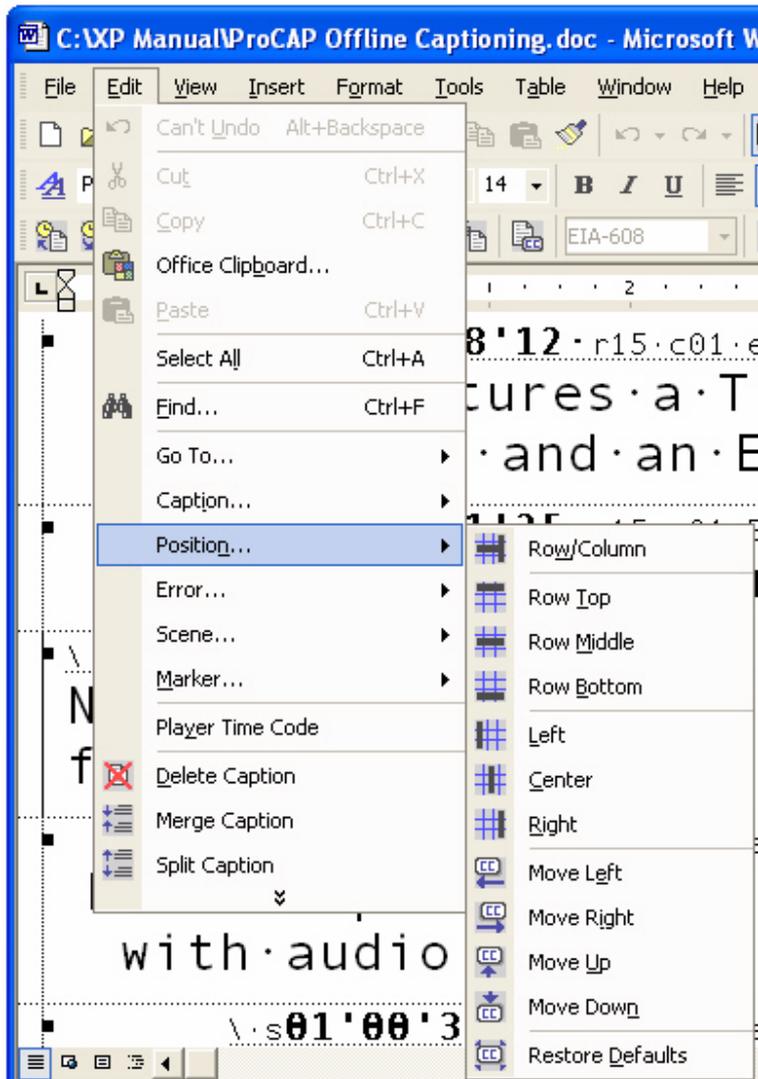
Multiple line captions may also be split on the Player screen by holding down any of the modifier keys, that is, the **Ctrl**, **Alt**, or **Shift** key and dragging the specific line with the right mouse button.

Caption justification should not be confused with caption positioning. The two are independent. The position of the caption determines where the longest line of the caption is displayed. Justification determines where the remaining shorter lines of the caption are displayed.



When a caption is created, that is the caption header is created; the positioning information will be the same as the positioning information for the caption before it.

To change the positions of the captions within the Editor, execute **Edit** → **Position** from the main Word menu:



If the **Alternative Shortcuts to Numeric Keypad** is enabled the following shortcut keys are available:

Position Left	<b>Ctrl + L</b>
Position Center	<b>Ctrl + E</b>
Position Right	<b>Ctrl + R</b>

### **Positioning Information in the Caption Preamble**

Captions may have lines that are in-dependent of one another, or locked together.

The positioning information appears in the caption preamble.

For example, the following caption preamble information represents a four-line

caption, where all the lines are locked together:

```
\ s01'00'15'16 r15 c01 e01'00'18'24 z32 pR .
```

The Caption record contains the following information:

- s = start time code (in-point)
- r = start row
- c = start column
- e = end time code (out-point)
- z = end column
- p = position (L = left, C = center, R= right)

For this caption, the preamble information will translate to:

Start time code = 01:00:15:16  
Caption start row = 15  
Caption start column = 1  
Caption end time code = 01:00:18:24  
Caption end column = 32  
Caption position = right

To change the caption line information, the user executes **Edit** → **P**osition → **R**ow/**C**olumn.

Row	Column		Position
	Start	End	
A	1	32	<input checked="" type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right
B	5	32	<input type="radio"/> Left <input checked="" type="radio"/> Center <input type="radio"/> Right
C	8	32	<input type="radio"/> Left <input type="radio"/> Center <input checked="" type="radio"/> Right
D	3	32	<input type="radio"/> Left <input checked="" type="radio"/> Center <input type="radio"/> Right

Locked Rows

Restore Defaults OK Cancel

Within the form, the user can change the row and column information for the given caption. The **Locked Rows** selector should be unchecked if the user wishes to make the individual lines independent.

Upon making the above changes, press **OK** and the caption preamble information will change to the following:

```
\ s01'00'15'16 r02'05'09'12 c01'05'08'03 e01'00'18'24 z32'32'32'32 pL'C'R'C .
```

The individual caption information is separated by apostrophes. In the above example, the first line of the four-line caption will start on row 2. The second line will start on row 5, the third line will start on row 9 and the last line of the caption will start on row 12.

Users may also change the header information manually to adjust time code and caption positioning, although this practice is not recommended. It is very prone to errors and ProCAP only provides general error reporting.

## **Vertical positioning**

Caption rows allow the user to set either the row of the first, or last line of a caption. For pop-on and paint-on, the set row will be the first line of the caption. For roll-up, the set row will be the bottom line, or base line, of the caption. If the user sets the row to be off the screen, ProCAP will adjust the setting so that the text will not be lost. For example, in a four-line pop-on caption with the row set to be 15, ProCAP will adjust the row to be 12 to allow the all lines of the caption to be viewed on the screen. Quick selects are available through the menu and shortcut keys to provide top, middle, bottom, row up, and row down positioning. The middle row is user definable within the current configuration file.

## **Horizontal positioning**

There are up to 4 variables that can to be used to set horizontal positioning:

1. Start column
2. End column
3. Position
4. Justification

Start column and end column define the valid columns that a caption can be positioned in. The caption will be displayed within and including the columns specified. The default columns are set at start column = 1, end column = 32, so that the entire width of the screen is used.

There are two cases that will be discussed below - all the lines of a caption are together or the lines of a caption are separated on the screen.

When all the lines of a caption are together, the start and end columns are usually the same for the entire caption.

For example, the following caption header information represents a four-line caption, when the lines are locked together.

```
\ s01'00'15'16 r15 c01 e01'00'18'24 z32 pR .
```

If the lines are separated, then there will be a start and end column for each line,

and they will be separated within the caption header by apostrophes.

\ s01'00'15'16 r02'05'09'12 c01'05'08'03 e01'00'18'24 z32'32'32'32 pL'C'R'C .

Either dragging the captions on the Player, or calling up the **Edit** → **Position** → **Row/Column** menu can change the information.

## Position and Justification

Positioning determines where the caption box is positioned. The caption text will be positioned within a caption box. The longest line in the caption determines the width of the caption box and the number of lines in the caption determines height of the caption box.

If **Edit** → **Position** → **Left** is executed, then the caption box is positioned so that the start column of the caption box is the Start column of the caption.

If **Edit** → **Position** → **Center** is executed, then the caption box is positioned so that it is centered between the Start and End columns of the caption.

If **Edit** → **Position** → **Right** is executed, then the caption box is positioned so that the end column of the caption box is the End column of the caption.

Justification is only applicable when all the lines are kept together. Justification determines how the lines are justified with one another within the caption box. They are justified within the caption box with respect to the longest line. You can justify the lines of the caption within the box so that the captions are justified to the left, justified in the center or justified on the right.

## Positioning Examples:

### Example 1

The caption file is a four-line file that will be captioned using pop-on.

Start column = 2  
End column = 7  
Positioning = Right  
Justification = Left

Caption text:

A  
AB  
ABC  
ABCD

.....	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	.....
Row 11								
Row 12				A				
Row 13				A	B			
Row 14				A	B	C		
Row 15				A	B	C	D	

The dark box around the rows and columns represents the caption box. Although the start column was 2 and the end column was 7, the longest line in the caption text has four letters, thus it determined the size of the caption box. The positioning was set to the right, thus the right most column will set the boundary of the caption box. If the longest had had five letters, the caption box would have been defined by column 3 to column 7 and row 12 to row 15.

The text within the caption box is justified to the left, so all lines are aligned from the left side of the caption box.

### Example 2

The caption file is a four-line file that will be captioned using pop-on.

Start column = 1

End column = 6

Positioning = Left

Justification = Right

Caption text:

A

AB

ABC

ABCDEFG

.....	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	.....
Row 11								
Row 12							A	
Row 13						A	B	
Row 14					A	B	C	
Row 15	A	B	C	D	E	F	G	

In this case, the last line of the caption is the longest line with 7 characters. The user assigned only 6 columns.

The dark box around the rows and columns represents the caption box. Although the start column was 1 and the end column was 6, the last line of the caption is the longest line with 7 characters, thus it determines the size of the caption box.

The text within the caption box is justified to the right; so all lines are aligned from the right side of the caption box.

If the justification were to the left, then the caption box would appear as follows:

.....	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	.....
Row 11								
Row 12	A							
Row 13	A	B						
Row 14	A	B	C					
Row 15	A	B	C	D	E	F	G	

## Pushing Captions

This section will explain how to push the current caption as close as possible to an adjacent caption without creating any transmission conflicts.

To push the current caption as close as possible with the previous caption.

- execute **E**dit → **C**aptions → **P**ush to Previous from the Word menu
- execute the shortcut key **Ctrl + Shift + Num /**
- execute the shortcut key **Alt + P** (if the alternate keyboard shortcut keys are enabled)

To push the current caption as close as possible with the next caption:

- execute **E**dit → **C**aptions → **P**ush to **N**ext from the Word menu
- execute the shortcut key **Ctrl + Shift + Num \***
- execute the shortcut key **Alt + Shift + P** (if the alternate keyboard shortcut keys are enabled)

Pushing captions together may cause a reading rate error in the previous caption. It is up to the captionist to fix the new error or leave it. If left, the error will not be reported again but in the caption preamble it will show **iDR** signifying that ProCAP is ignoring all minimum duration error and reading rate errors.

## Splitting Captions

To split the current caption where the cursor is:

- execute **E**dit → **S**plit **C**aption from the **W**(ord menu
- execute the shortcut key **Ctrl + Q** (if the **Alternative Shortcuts to Numeric Keypad** is enabled)
- press the **Insert a New Caption**  command button

This action will split the current caption into two captions, with the cursor dividing the caption text.

If the current Player position is within the current caption, then the caption is split at the current Player position. Otherwise, the two captions will be split to create a consistent reading rate.

Auto-Split is an advanced version of Split that operates on block selections.

## Setting Caption Attributes

Highlighting the desired selection and using the following controls can set caption attributes:

Attribute	Method	Shortcut Key
Italics	Click on the <i>I</i>	Ctrl + I
Underline	Click on the <u>U</u>	Ctrl + U
Left justification	Click on the  button	
Center justification	Click on the  button	
Right justification	Click on the  button	
Flash	<b>Format</b> → <b>F</b> ont → <b>T</b> ext Effects → <b>B</b> linking <b>B</b> ackground	
Foreground color	<b>Format</b> → <b>F</b> ont → <b>F</b> ont → <b>F</b> ont <b>C</b> olor or chose a color from the listing under the  icon. Note - not all of the colors are viable. The viable colors are those that are currently assigned in the highlighter  icon.	
Background color	Format highlighter icon  on the toolbar.	
Symbols	Set keyboard for given language, access the Symbol Table, navigate to chose the character and insert it.	As listed in the <b>I</b> nsert → <b>S</b> ymbol <b>T</b> able

 Applying styles in Word may overwrite any previous formatting, such as italics and underline. If attributes are set in the transcript, prior to applying a caption style, there is no guarantee that all attributes will be kept by Word once the caption style has been assigned. To ensure attributes are saved, a caption style should be chosen prior to applying attributes to the transcript.

 When a caption with a highlight word is previewed in the Player, the entire line will appear highlighted. There is no cause for alarm, as only the specified word will be highlighted when the captioned file is encoded.

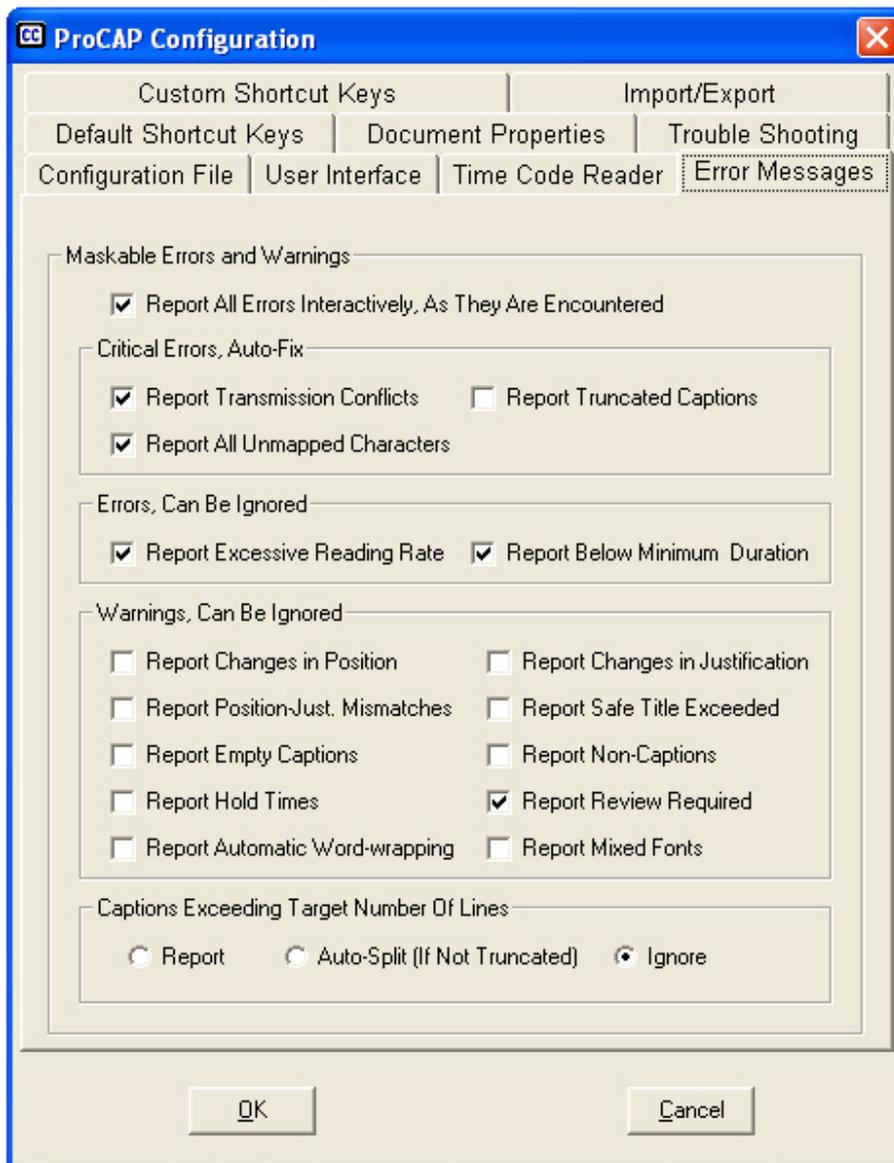
 In EIA-608, all of the formatting codes are implemented as spacing commands in the final output. ProCAP will automatically insert spaces into the text as required to achieve the formatting specified. This needs to be taken into account when typing lines with close to 32 characters, as these lines may auto-wrap.

## **ProCAP Errors**

## Editor Warnings and Errors

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, error and warning messages may appear.

ProCAP auto-corrects most captioning problems by default. To view and/or change the error and warnings that are set, execute **Tools** → **ProCAP Configuration**, and click on the **Configuration File** tab.



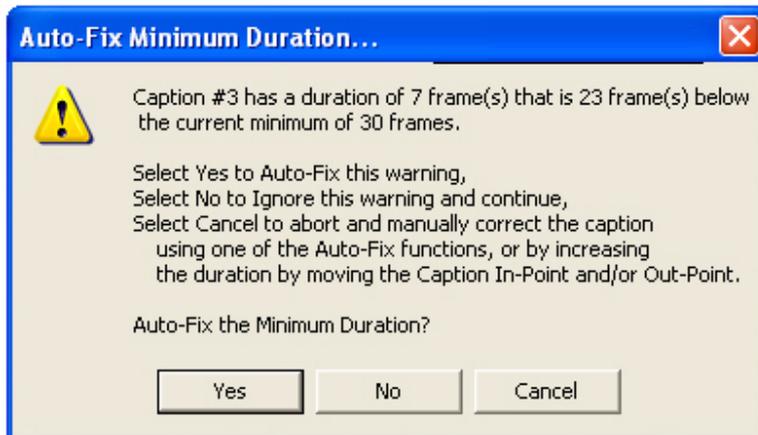
The different Error and Warning Messages that may appear:

- Captions Below Minimum Duration
- Captions Out of Order
- Caption Transmission Conflicts
- Caption Truncation Warnings
- Changed Justification and Positioning
- Empty Captions
- Exceeding Target Lines
- Excessive Reading Rates
- Mixed Fonts
- Non Captions
- Optional Character in Column 32
- Report Hold Times
- Report Review Required
- Report Safe Title Exceeded
- Unloaded Captions
- Unmapped Character Warnings
- Unmapped Fonts
- Word Freezes
- Word Wrapping

For further information about the errors and warnings refer to the Error Messages Configuration section of the manual.

## Captions Below Minimum Duration

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated has a duration that is below the minimum duration set in the current configuration file.



Press the **Yes** command button or **Enter** key to auto-fix this warning and continue the verification process. Auto-fix will move the out-point of the caption to the current minimum of 30 frames.

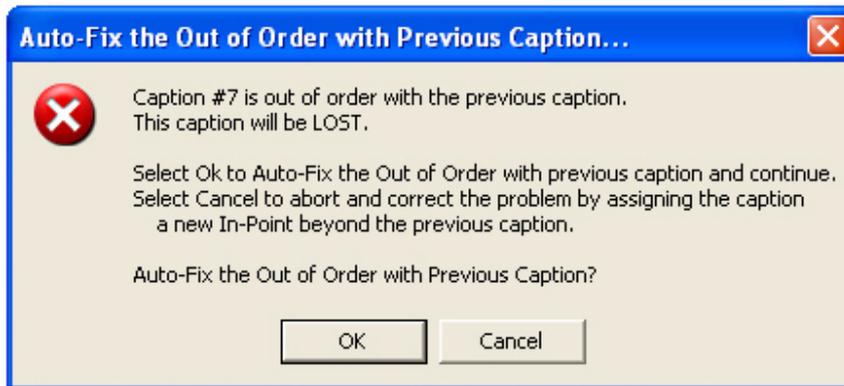
Press the **No** command button to ignore this warning and continue the verification process.

Press the **Cancel** command button or **Esc** key to abort the update process. The caption in error is selected as the current caption in the Editor for review.

To disable this warning from appearing, refer to Error Messages Configuration in the manual.

## Caption Out of Order

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following critical error message will appear if the caption being updated is out of order in time code with the preceding caption in the caption file.



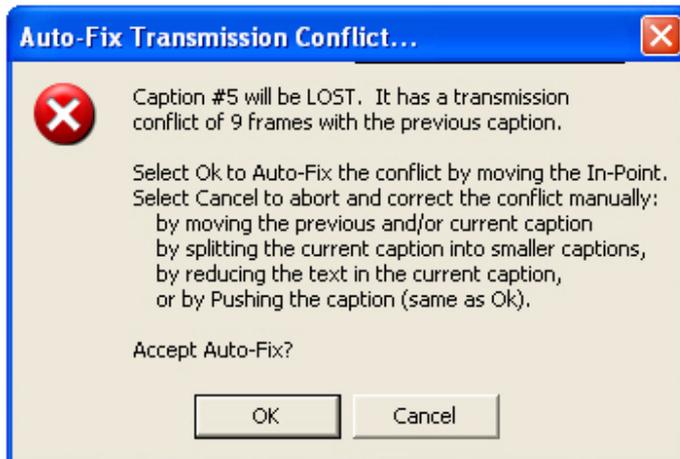
Press the **OK** command button or **Enter** key auto-fix the out of order caption and continue the verification process. Auto-fix assumes the placement of the captions in the document is correct and the timecode of the caption the error is on will be adjusted.

Press the **Cancel** command button or **Esc** key to abort the update process. This problem must be corrected in order to resume the update process.

This is a critical error and cannot be disabled from appearing.

## Caption Transmission Conflicts

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following critical error message will appear if transmission data for the caption being updated overlaps the transmission data of the preceding caption. Transmission data overlap is a result of the caption in-points being placed too close together. The conflicting caption will be lost.



Press the **OK** command button or **Enter** key to accept the auto-fix and continue the update process. The auto-fix performs a Push To Previous operation on the conflicting caption, to delay the in-point of the conflicting caption the amount of time required to resolve the conflict.

Press the **Cancel** command button or **Esc** key to abort the update process. The caption in error is selected as the current caption in the Editor. This problem must be corrected in order to resume the update process. To correct the conflict manually:

- move the previous and/or current caption to increase the duration between the two enough to resolve the conflict
- split the current caption into smaller captions
- reduce the text in the current caption and/or previous caption
- execute **Edit** → **Captions** → **Push To Previous**, or press the shortcut key **Ctrl + Shift + Num /**

To disable this warning from appearing, refer to Error Messages Configuration in the manual. If this warning is de-selected from appearing, the transmission conflicts will be automatically corrected.

## Caption Truncation Warnings

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated would otherwise be truncated because it exceeds the maximum number of lines that can fit on the screen.



Press the **Yes** command button or **Enter** key to accept an auto-split of the caption. The caption is auto-split into smaller captions until no caption data is lost.

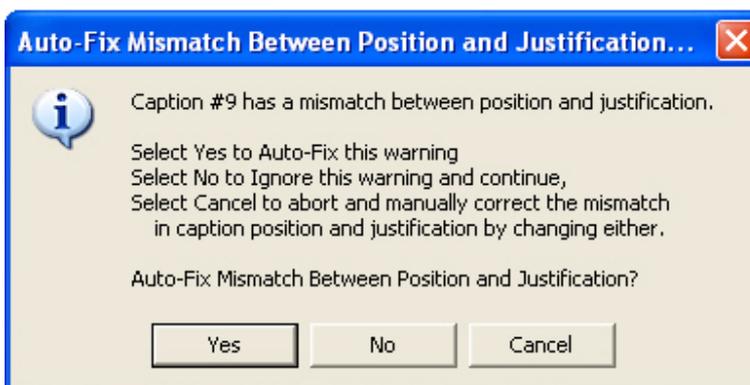
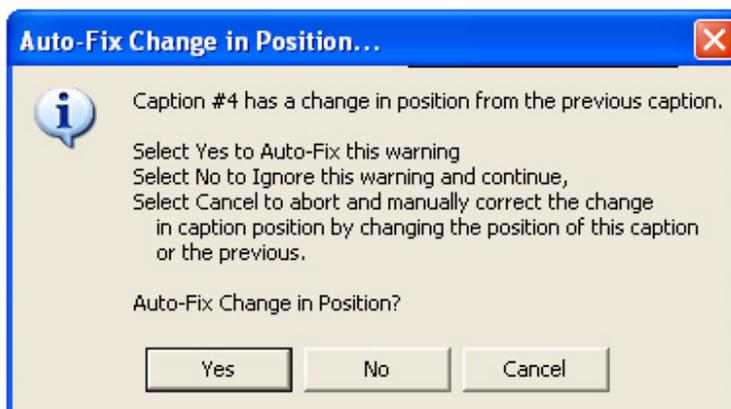
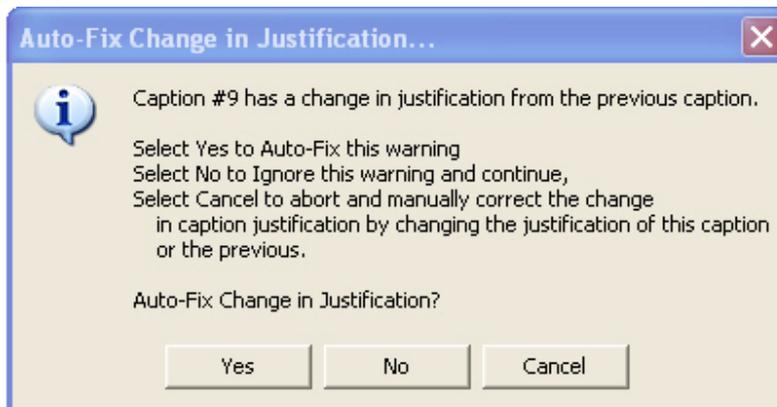
Press the **No** command button to ignore the lost caption text and accept that caption data will be lost.

Press the **Cancel** command button or **Esc** key to abort the update process and manually correct the problem by editing the caption.

To disable this warning from appearing, refer to Error Messages Configuration in the manual. If this warning is de-selected from appearing, the caption will be automatically auto-split

## Changed Justification and Positioning

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, one of the following warning messages will appear if the caption position or justification is different than the one preceding it.



Press the **Yes** command button or **Enter** key to accept an auto-fix. This will change the positioning or justification of the current caption to that of the preceding

caption.

Press the **No** command button to ignore the warning and continue the verification process.

Press the **Cancel** command button or **Esc** key to abort the update process and manually correct the problem by editing the positioning and/or justification of the caption.

To disable this warning from appearing, refer to Error Messages Configuration in the manual.

## Empty Captions

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated is empty.



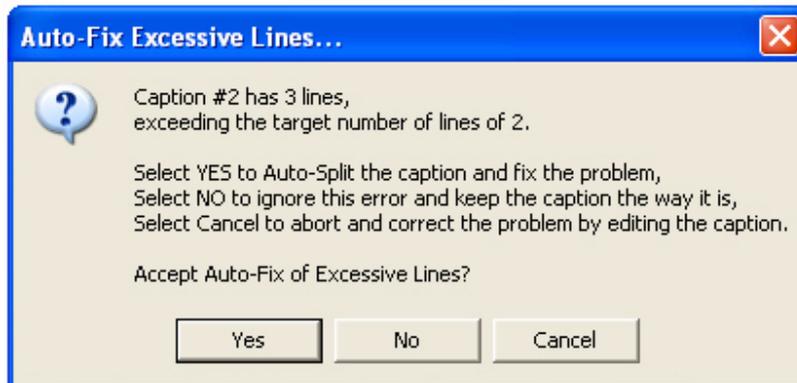
Press the **OK** command button or **Enter** key to ignore the warning and continue the update process.

Press the **Cancel** command button or **Esc** key to abort the update process. The caption in error is selected as the current caption in the Editor for review.

To disable this warning from appearing, refer to Error Messages Configuration in the manual.

## Exceeding Target Lines

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated exceeds the target number of lines set in the current configuration file. For example: if roll-up has been chosen, the target number of lines would be 1.



Press the **Yes** command button or **Enter** key to accept an auto-split of the caption. The caption is auto-split into smaller captions until no caption data is lost.

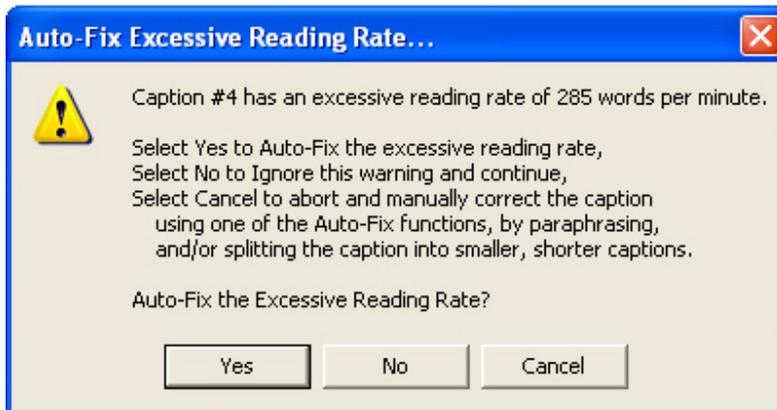
Press the **No** command button to ignore the warning and continue the verification process.

Press the **Cancel** command button or **Esc** key to abort the update process and manually correct the problem by editing the caption.

To disable this warning from appearing, refer to Error Messages Configuration in the manual.

## Excessive Reading Rates

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated has a reading rate exceeding the maximum reading rate specified in the current configuration file.



Press the **Yes** command button or **Enter** key auto-fix the excessive reading rate. Auto-fix will adjust the out-point of the caption to fit within the default reading rate.

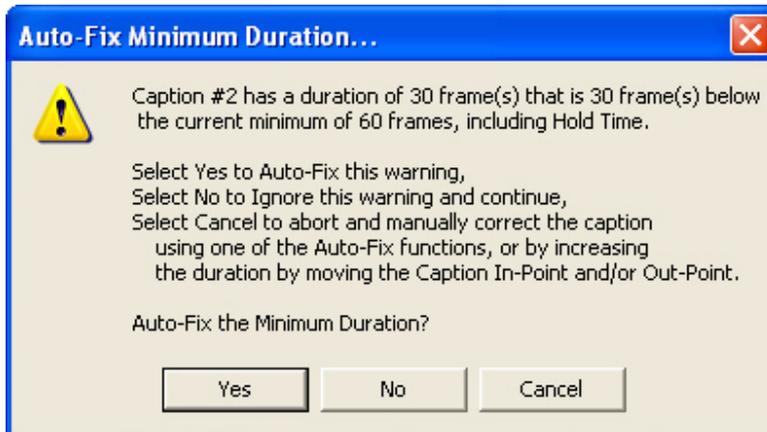
Press the **No** command button to ignore the warning and continue the verification process.

Press the **Cancel** command button or **Esc** key to abort the update process and manually correct the problem. To correct this the caption can be made shorter by paraphrasing the audio and/or splitting the caption into smaller, shorter captions.

To disable this warning from appearing, refer to Error Messages Configuration in the manual.

## Hold Times

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated has a time that is below the hold time as set in the configuration file.



Press the **Yes** command button or **Enter** key to auto-fix this warning and continue the verification process. Auto-fix will move the out-point of the caption to the current minimum number of frame, including the hold time.

Press the **No** command button to ignore this warning and continue the verification process.

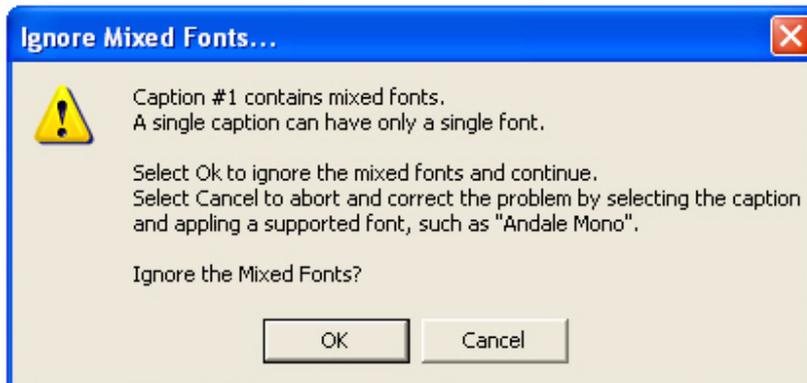
Press the **Cancel** command button or **Esc** key to abort the update process. The caption in error is selected as the current caption in the Editor for review.

To disable this warning from appearing, refer to Error Messages Configuration in the manual.

 This error is most common in roll-up captions that clear the screen. In the default configuration the caption duration must be greater than the minimum duration and the hold time.

## Mixed Fonts

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated contains more than one font.



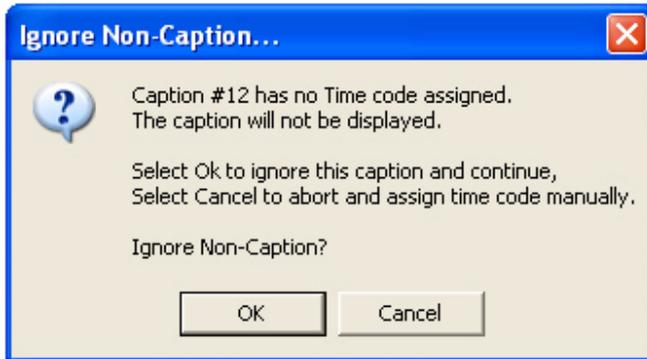
Press the **OK** command button or **Enter** key to ignore the mixed fonts.

Press the **Cancel** command button or **Esc** key to abort the update process and manually change the font to a supported font. The caption in error is selected as the current caption in the Editor for review.

To disable this warning from appearing, refer to Error Messages Configuration in the manual.

## Non Caption

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated is not a valid caption, for example, there is no Timecode assigned to the caption.



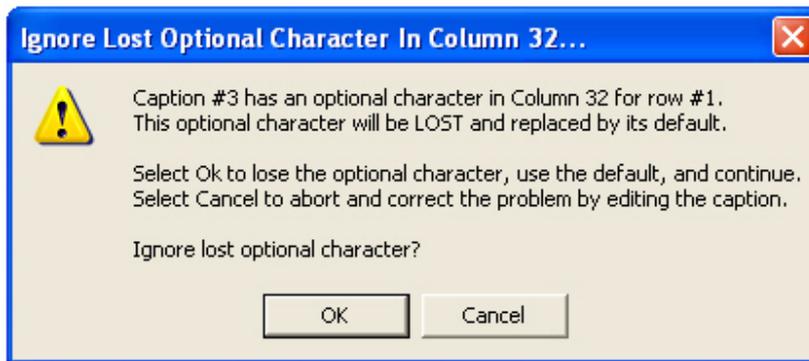
Press the **OK** command button or **Enter** key to ignore the warning and continue the update process.

Press the **Cancel** command button or **Esc** key to abort the update process. The caption in error is selected as the current caption in the Editor for review.

To disable this warning from appearing, refer to Error Messages Configuration in the manual.

## Optional Character in Column 32

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the character in column 32 is an optional character.



An optional character, is one that is mapped within EIA-608, but it is not a mandatory character that all decoder must be able to display. For a complete listing of mapped characters see Appendix G.

Press the **OK** command button or **Enter** key to accept the replacement of that character with a space or press **Cancel** to abort the update process and manually correct the problem by changing character.

## Review Required

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated requires review.



Press the **OK** command button or **Enter** key to ignore the warning and continue the update process.

Press the **Cancel** command button or **Esc** key to abort the update process. The caption will be selected as the current caption in the Editor for review.

To disable this warning from appearing, refer to Error Messages Configuration in the manual.



Execute the keyboard shortcut key **Ctrl + Shift + O** to flag a caption for review.

## Safe Title Exceeded

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated exceeds the Safe Title Area, as defined in the configuration file.



Press the **Yes** command button or **Enter** key to accept how the sub-title will appear and continue the verification process.

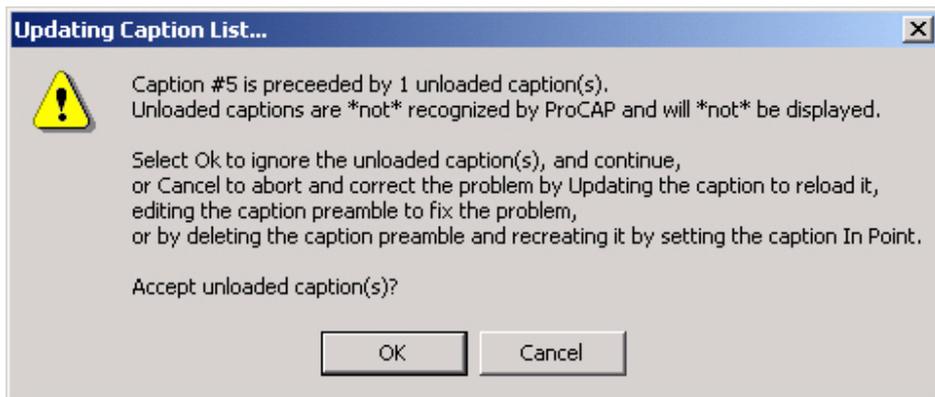
Press the **Cancel** command button or **Esc** key to abort the update process. The caption is selected as the current caption in the Editor for review.

To disable this warning from appearing, refer to Error Messages Configuration in the manual.

## Unloaded Caption

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated is not a valid caption loaded by ProCAP.

Unloaded captions are typically caused by missing or corrupted Caption Preambles or captions that have not had time code assigned to them.



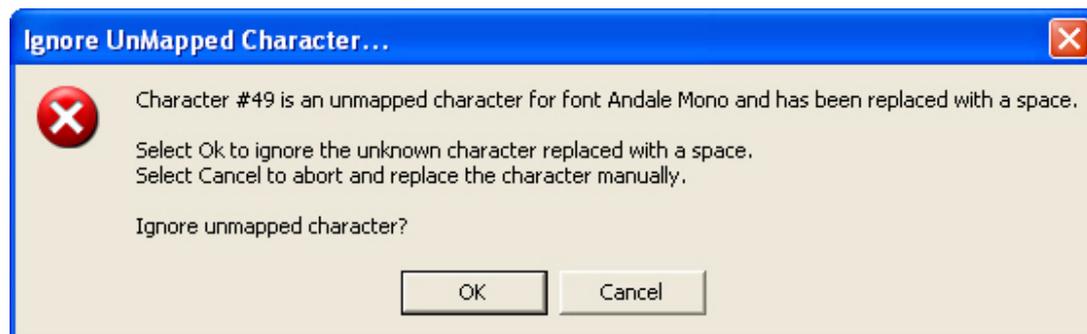
Press the **OK** command button or **Enter** key to ignore the warning and continue the update process.

Press the **Cancel** command button or **Esc** key to abort the update process. The caption in error is selected as the current caption in the Editor for review.

## Unmapped Character Warnings

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated contains an unmapped character.

Unmapped characters have no EIA-608 equivalent characters for encoding to video as mapped in the current font definition file.



Press the **OK** command button or **Enter** key to ignore the warning and continue the update process.

Press the **Cancel** command button or **Esc** key to abort the update process. The caption in error is selected as the current caption in the Editor for review. The unmapped character is block selected. To see non-printing characters, such as a **Tab** character, the **Caption Headers Show/Hide Toggle**  command button on the ProCAP toolbar should be set to show all.

To disable this warning from appearing, refer to Error Messages Configuration in the manual. If the warning is disabled, the captions will be automatically corrected.

 The Auto-Text feature in Word can introduce unmapped characters dynamically, by replacing characters while they are typed with symbols that are not mapped. Some examples are regular symbol characters (minus, three periods) with special symbols (em-dash, ellipse). Most Auto-Text should be disabled by default. For more information, refer to Setup of Word in Word Compatibility.

# Unmapped Font

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated contains an unmapped font.



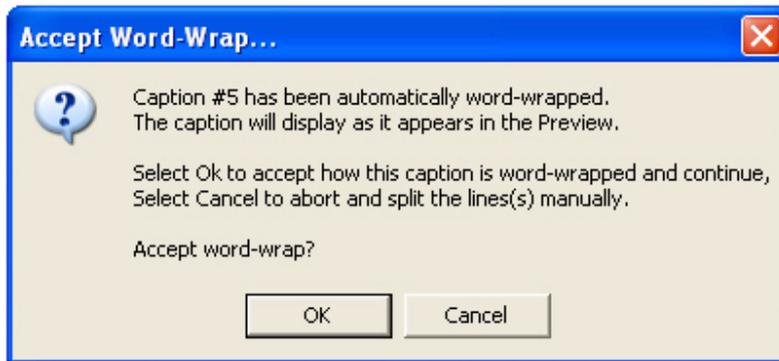
Press the **OK** command button or **Enter** key to manually fix the unmapped font by choosing a mapped font or by creating a new font file.

Unmapped font errors result when there is no font mapping file in the current directory for the font being used. To create a new font file, refer to the ProCAP Font Definition File in Appendix G.

This is a critical font and must be corrected before a Transfer File is created.

## Word Wrapping

Upon executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file, the following warning message will appear if the caption being updated has been automatically word-wrapped to fit on the display.



Press the **OK** command button or **Enter** key to ignore the warning and continue the update process. This warning will not be reissued during the current edit session.

Press the **Cancel** command button or **Esc** key to abort the update process. The caption in error is selected as the current caption in the Editor for review. Insert a new line (**Enter**) within the caption to set the line breaks where desired.

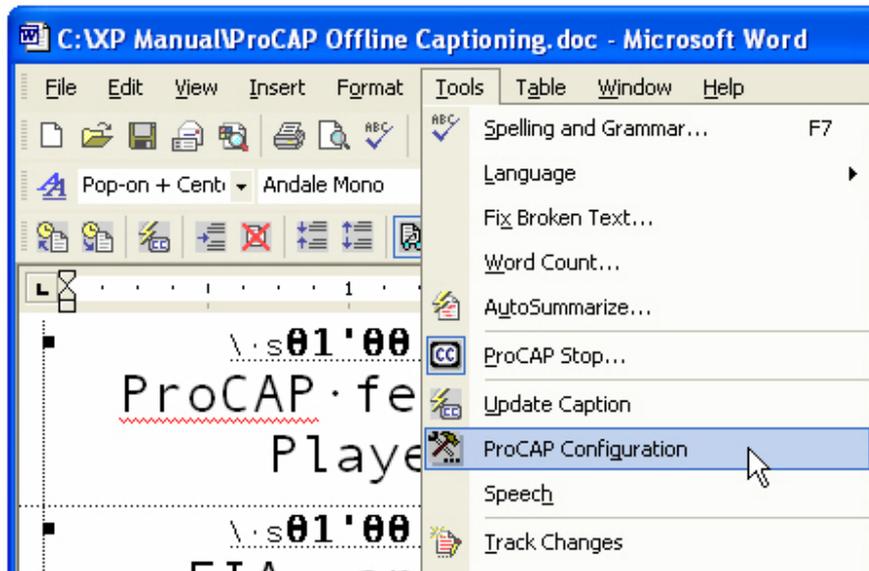
To disable this warning from appearing, refer to Error Messages Configuration in the manual.

 In EIA-608, all of the formatting codes are implemented as spacing commands in the final output. ProCAP will automatically insert spaces into the text as required to achieve the formatting specified. Although the text may only contain up to 32 characters in a line, due to special characters being inserted, Word may have to automatically word-wrap the text in the final output.

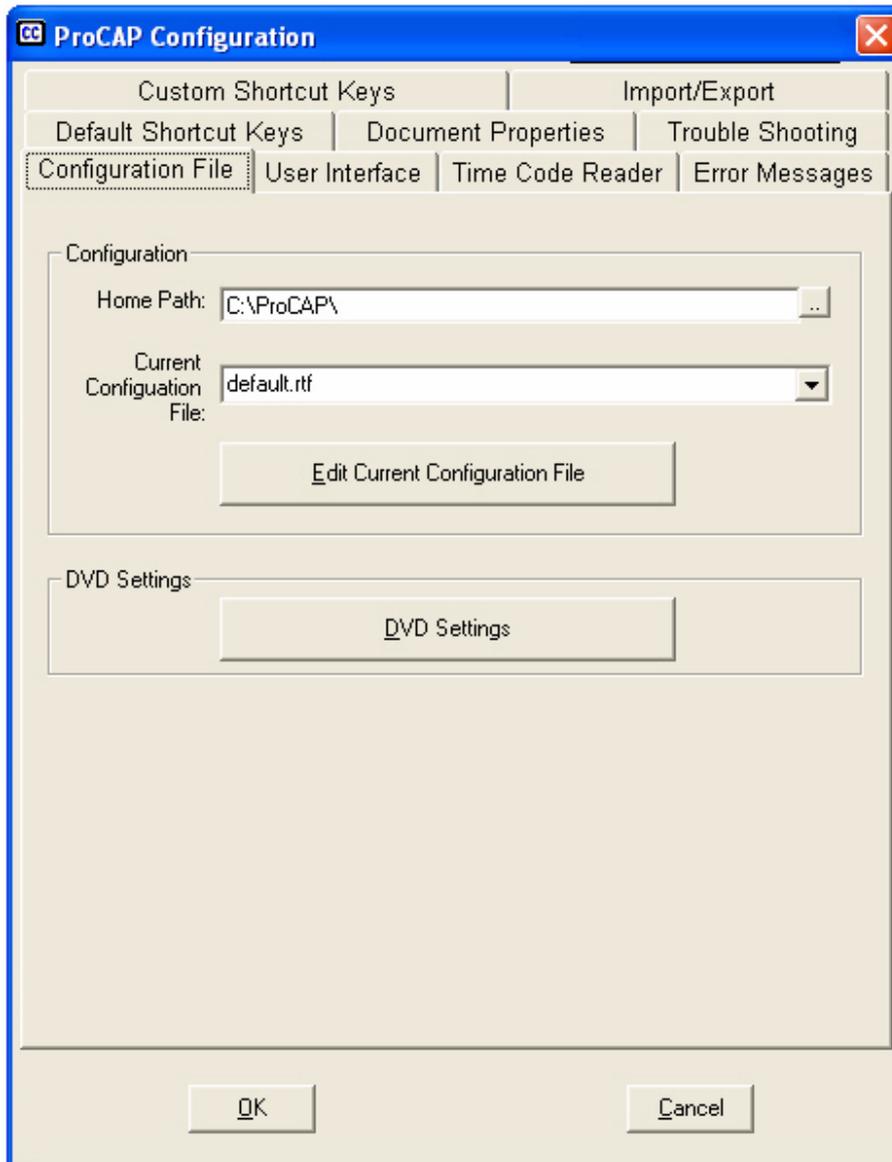
# Configuration

## Custom Configurations

To change configuration options, execute **T**ools → **P**roCAP Configuration from the Word menu.



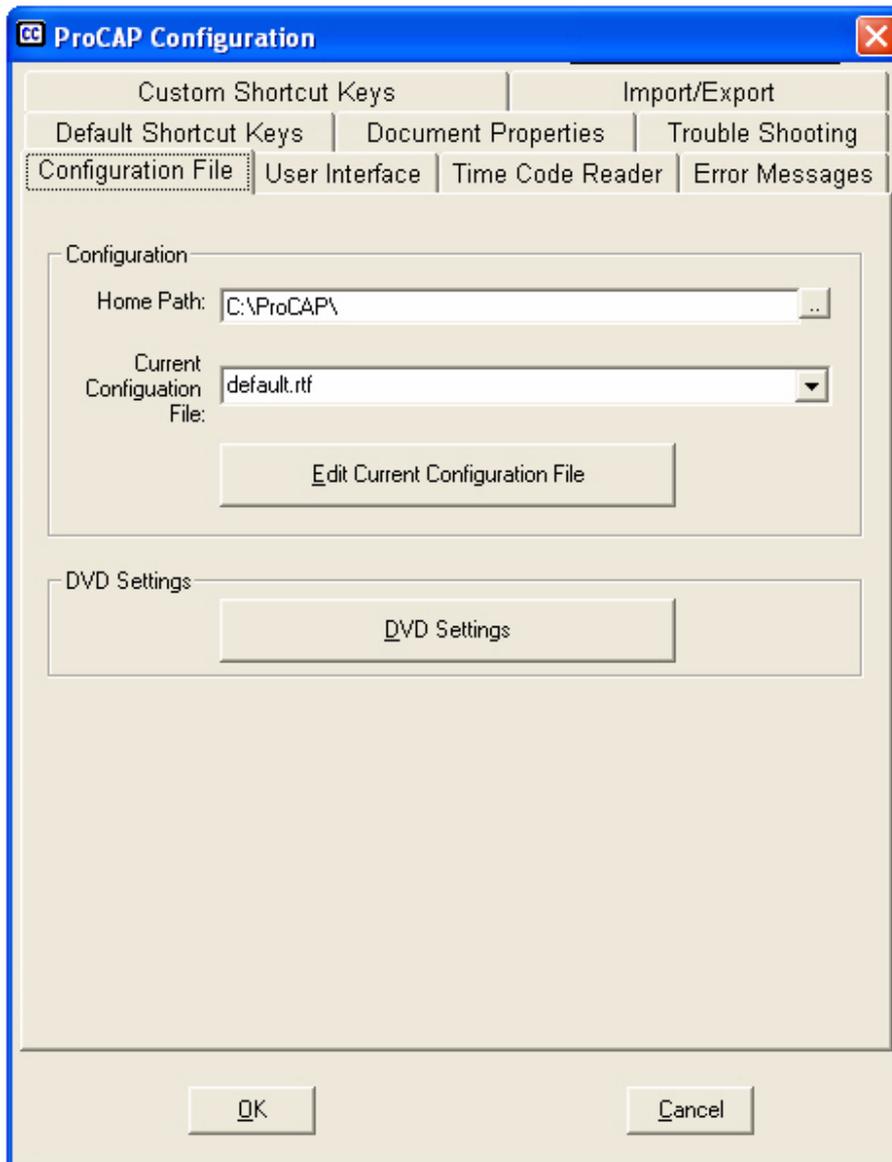
The following screen will appear:



Press the tab of the configuration option to change:

- Configuration File
- User Interface
- Time Code Reader
- Error Messages
- Default Shortcut Keys
- Document Properties
- Trouble Shooting
- Custom Shortcut Keys
- Import/Export

## Configuration File



### Configuration

To change the home path of where ProCAP reads its configuration files, enter it in the **Home Path** dialog box, or browse to it using the associated directory browser. This is only changed when dealing in a networked environment.

 Changing the home path to a network path, will allow configuration files to be shared within a work group. This will ensure that all ProCAP stations are using the same set of configuration and font files, and are consistent.

To change the current configuration file, select the desired configuration file from the **Current Configuration File** drop down box. All available configurations are listed.

To make changes to the current configuration file, or create a new one, press the **Edit Current Configuration File** command button.

This will open the current configuration file in a separate window.

1. Edit the current file as required. For more information refer to Appendix F - ProCAP Custom Configuration File.
2. Use **File** → **Save** to save your changes to the current configuration file.
3. Use **File** → **Save As** to create a new configuration file, named "<new configuration name>.rtf". The file type must remain as Rich Text Format (.rtf), and must be saved in the same directory it was opened in.

 Only edit the User Values outlined in the tables in the configuration file. Do not change the order or the layout of the tables

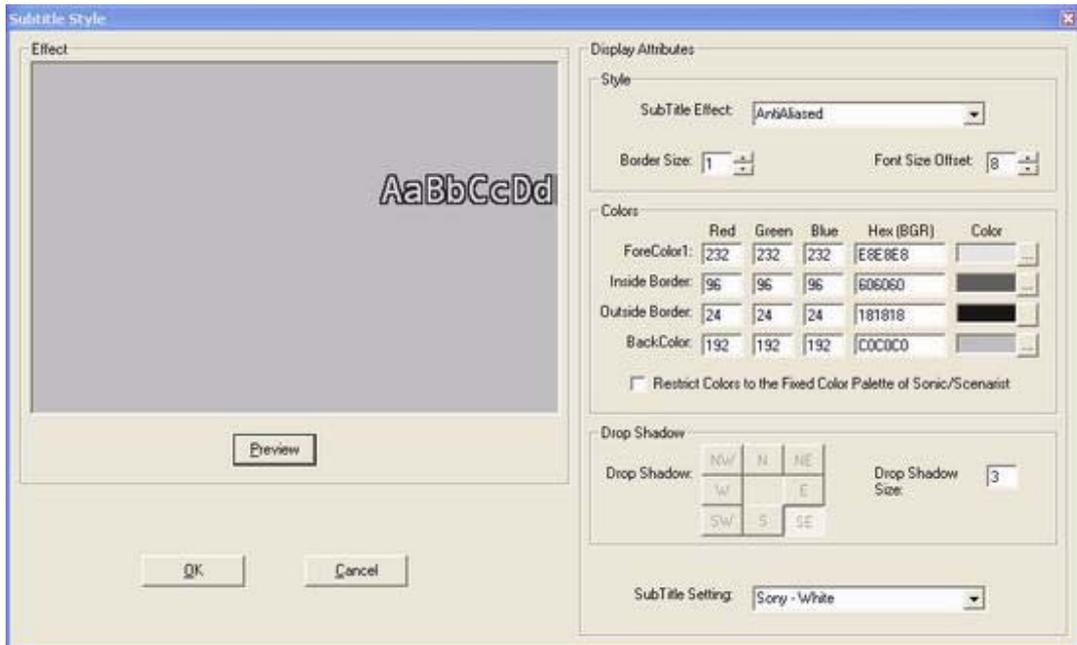
 After changing the configuration file or any configuration parameters, it is recommended that ProCAP be shutdown and started again.

 Time can be saved by saving user specific configurations and sharing them with all systems. This will prevent continual readjustment of settings.

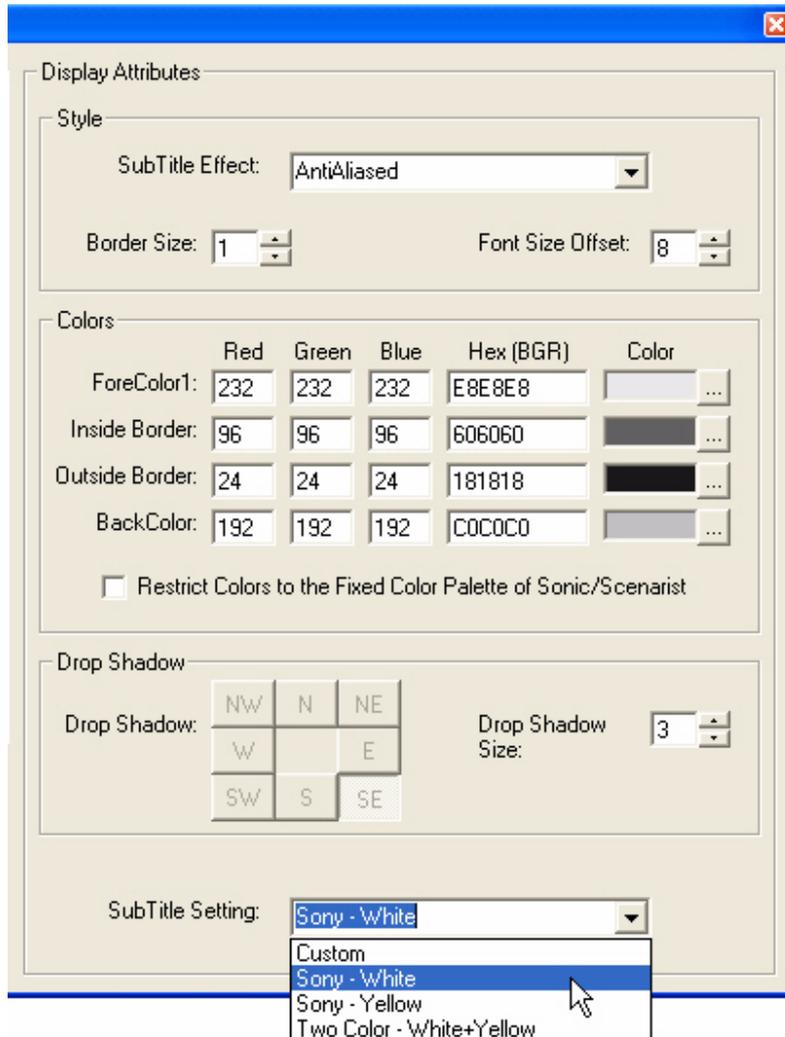
For a listing of items within the configuration file, refer to Appendix F - ProCAP Custom Configuration File.

## DVD Settings

When subtitling for DVD, the final output can be previewed on the Player by selecting the appropriate DVD settings at the start of your project.



From the **DVD Settings**, three standard pre-set styles are available Sony - White, Sony - Yellow and Two Color - White + Yellow.



In addition, within the **Sub Title Settings** menu, choosing the **Custom** setting gives full access to all the settings on the form including border size, font size offset, forecolor, inside border color, outside border color, back color, drop shadows and the size of the drop shadow.

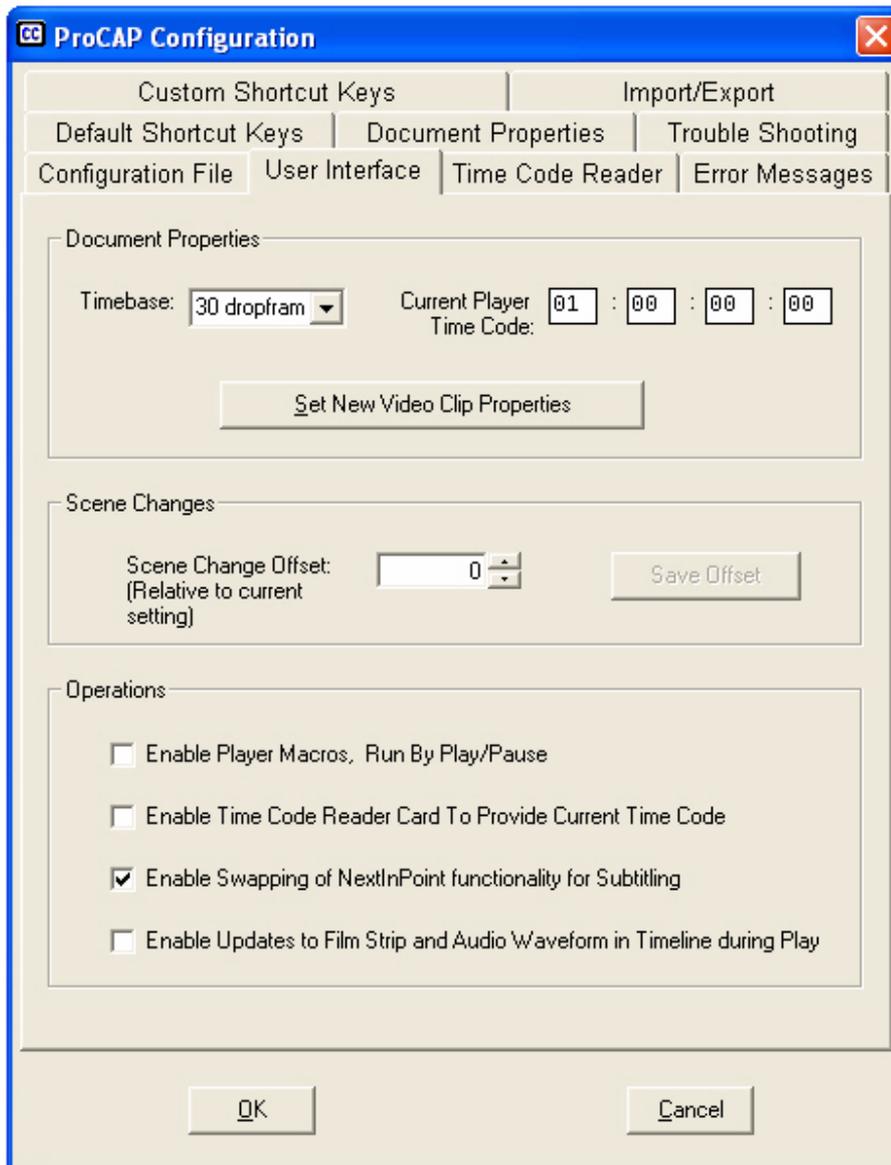
For systems that only support a fixed color palette such as Sonic / Scenarist, a **Restrict Color Palette** option is available in the form.

An example of how the current settings will look can be seen by pressing the **Preview** button.

Within ProCAP, by changing the format target standard to DVD, this will enable the WYSIWYG DVD preview in the Player.

 To preview subtitles, ensure that the target standard is set to DVD. To verify the target standard, from the Word command menu execute **Format** → **Target Standard** → **DVD Subtitle**.

## User Interface



### Document Properties

The Timebase and starting time code of the Source Video File are set after first open in ProCAP, and saved to a .TDL file of the same name and location as the Source Video File.

The initial values for Timebase and starting time code of the Source Video File can be changed or corrected here by editing the Timebase and/or Source Clip Start dialog boxes.

Pressing Set New Video Clip Properties saves the new settings back to the .TDL

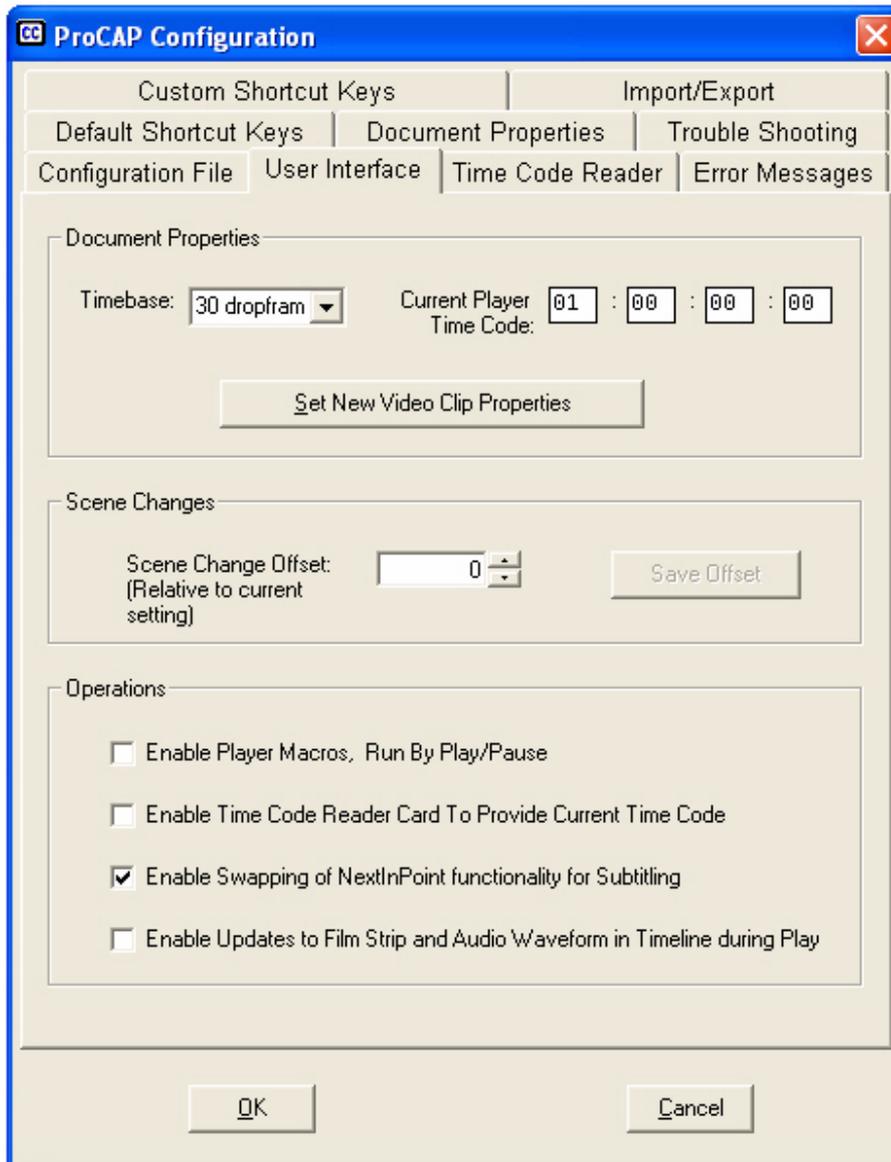
file.

In Time Code Entered, the start of video is used as the reference point for the Source Video Start time code value, by default, just like the initial setup.

Alternatively, the Current video frame can be selected, and the time code of the current Player position entered. Use this method to recover from captured files that have pauses, dropped frames, or duplicated frame right at the beginning of video.

## **Scene Changes**

Captured videos from some sources have dropped frames right at the beginning that can cause the scene changes to be offset by a small number of frames. To correct this adjust the scene change offset by the opposite amount, save the offset, stop ProCAP and restart. The scene changes will now be offset by the set amount to line up where specified.



## Operations

**Enable Player Macros, Run by Play/Pause**, runs the macros defined in the current configuration file on the Player Play/Pause events. When active, the

**Player Macros** icon  appears on the status bar of the Player.

The default operation for this control, when selected and enabled, is to create a new caption In-Point with each Play operation, and to set the caption Out-Point with each Pause operation. For more information on using this mode, refer to the Starting with a Blank Document section within the Creating Captions section of the manual.

Enabling the **Player Macros** is only available in Transcript mode and by default, the **Player Macros** is disabled when ProCAP is started.

**Enable Time Code Reader Card To Provide Current Time Code** allows an external time code source, such as a VTR, to be used as the time code source. A Time Code Reader must be installed and operational before enabling this option.

**Enable Swapping of NextInPoint functionality for Subtitling** allows the for swap between the keyboard shortcut keys **Num Enter** and **Ctrl + Num Enter**. **Num Enter** sets the in-point for the caption and joins it to the previous caption. **Ctrl + Num Enter** is used when out-points are set where they are predicted to break, or where they are set. Generally in captioning, captions are joined, however, when creating subtitles, the out-points are set to break where they are predicted or where they are set. Swapping the keyboard shortcut keys allow for more efficiency when creating subtitles.

**Enable Updates to Film Strip and Audio Waveform in Timeline during Play** can be enabled so that the Filmstrip and Audio Waveform are continually updated. The default is that they are only updated when the Player stops playing.

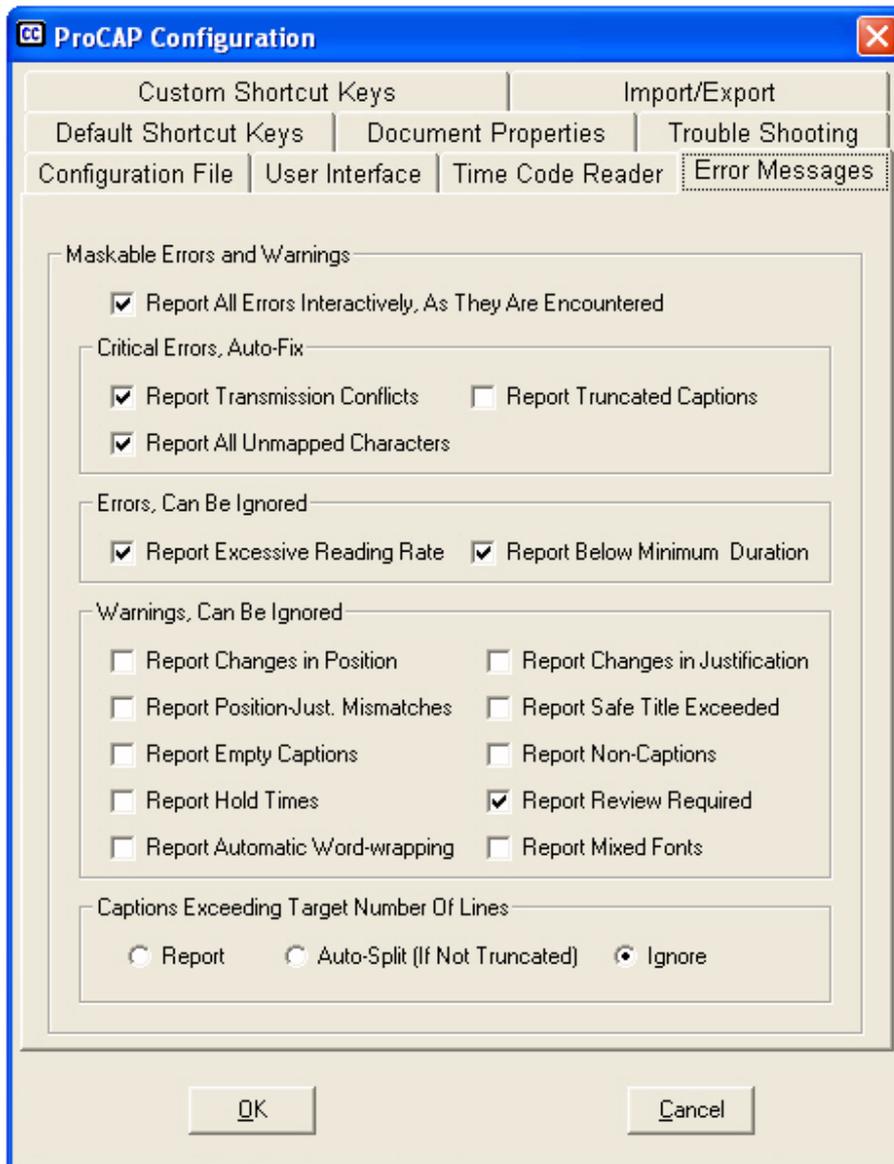
## Time Code Reader

The screenshot shows the 'ProCAP Configuration' dialog box with the 'Time Code Reader' tab selected. The dialog has a blue title bar and a tabbed interface. The 'Time Code Reader' tab is active, showing configuration options for timecode reading. The 'Configuration' section includes 'Timecode Reader Source' with radio buttons for 'Auto Source Selection' (selected), 'LTC Only', and 'VITC Only'. The 'VITC' section has a checked 'Auto Detect VITC Lines' checkbox and two spinners for 'VITC Video Line 1' (set to 12) and 'VITC Video Line 2' (set to 14). The 'Status' section contains input fields for 'Timecode:', 'Source:', 'Direction:', 'Speed:', 'DLL Version:', 'Drop Frame:', and 'VITC Line:', along with a 'Test' button. At the bottom, there is a 'Timecode Cards' dropdown menu, a 'Save' button, and 'OK' and 'Cancel' buttons.

The **Time Code Reader** settings are used only in conjunction with **User Interface** → **Operations** → **Enable Time Code Reader Card To Provide Current Time Code**. The Time Code Reader is not used for normal operations.

See Time Code Reader Configuration in the Transfer Utility section of the manual for more information.

## Error Messages



When executing **Verify Captions** or creating a Transfer file, all captions are checked and errors are reported.

The errors that users want to be reported to them, can be pre-selected in the **ProCAP Configuration** box as shown above. (**T**ools → **P**roCAP **C**onfiguration).

 The default settings for all of the **Maskable Errors and Warnings** are set by the current configuration file when ProCAP loads. These settings are applied to new caption files.

 The current settings are saved with each caption file, allowing settings to be restored when a caption is reopened.

## Report All Errors Interactively, As They Are Encountered

This is selected by default and will allow captionists to see the errors as they arise when performing a ProCAP operation such as updating a caption as it is being created (**Num 5**), executing **Verify Captions**, **Go To Next Error**, or creating a Transfer file. Captionists may address and correct the errors interactively.

Error icons are displayed on the Timeline to show the errors that were generated when updating or verifying captions. To bring up the dialogue boxes that announce the warnings, the user will need to use the functions **Go To Next Error (Num \*)** and **Go To Previous Error (Num /)** to view the errors and correct them.

For a list of the error icons refer to Error Reporting within the Timeline section of the manual.

## Auto-Fix Errors

Auto-Fix is enabled by default. If a captionist has not selected to report certain errors, where possible, they will be Auto-Corrected. If the error is to be reported, the captionist will have the choice to auto-fix or manually correct the error.

- **Report Transmission Conflicts** - will report all occurrences where the transmission data for the caption being updated overlaps the transmission data of the preceding caption. The captionists will have the option to auto-fix the error or correct it manually. If de-selected, the auto-fix performs a **Push To Previous** operation on the conflicting caption, to delay the in-point of the caption the amount of time required to resolve the conflict.
- **Report Truncated Captions** - will report captions that would be truncated because they exceed the maximum number of lines that can fit on the screen. If de-selected, the caption will be auto-split until no caption data is lost.
- **Report All Unmapped Characters** - will report characters that have no EIA-608 equivalent characters for encoding to video as mapped in the current font definition file. If de-selected, the unmapped characters will be converted to spaces.

## Errors that Can Be Ignored

- **Report Excessive Reading Rate** - will report a caption that has a reading rate exceeding the maximum reading rate specified in the current

configuration file. If de-selected, the reading rate will be ignored.

- **Report Below Minimum Duration** - will report captions where the duration is below the minimum duration set in the configuration file. If de-selected, the error will be ignored.

## Warnings that Can Be Ignored

- **Report Changes in Position** - warns when the caption position is different than the one preceding it.
- **Report Changes in Justification** - warns when the caption justification is different than the one preceding it.
- **Report Mismatches in Position-Justification** - warns when the justification does not match the default justification set for the given position. Default positions are set under the **Document** Tab within **Tools** → **ProCAP Configuration**.
- **Report Safe Title Exceeded** - warns when the sub-title is larger than the safe area as defined in the Configuration File.
- **Report Empty Captions** - warns when there are empty captions.
- **Report Non-Captions** - warns when there is text with no timecode assigned.
- **Report Hold Times** - when selected, Hold Times are verified to ensure that they meet the minimum Hold Time set in the ProCAP Configuration. This is used for roll-up, where captions that clear the screen, are required to have hold times added to their timecode so that the reading rates are constant.
- **Report Review Required** -
- **Report Automatic Word-wrapping** - warns when Word wraps text to fit on the display.
- **Report Mixed Fonts** - warns when there is more than one type of font within the caption.

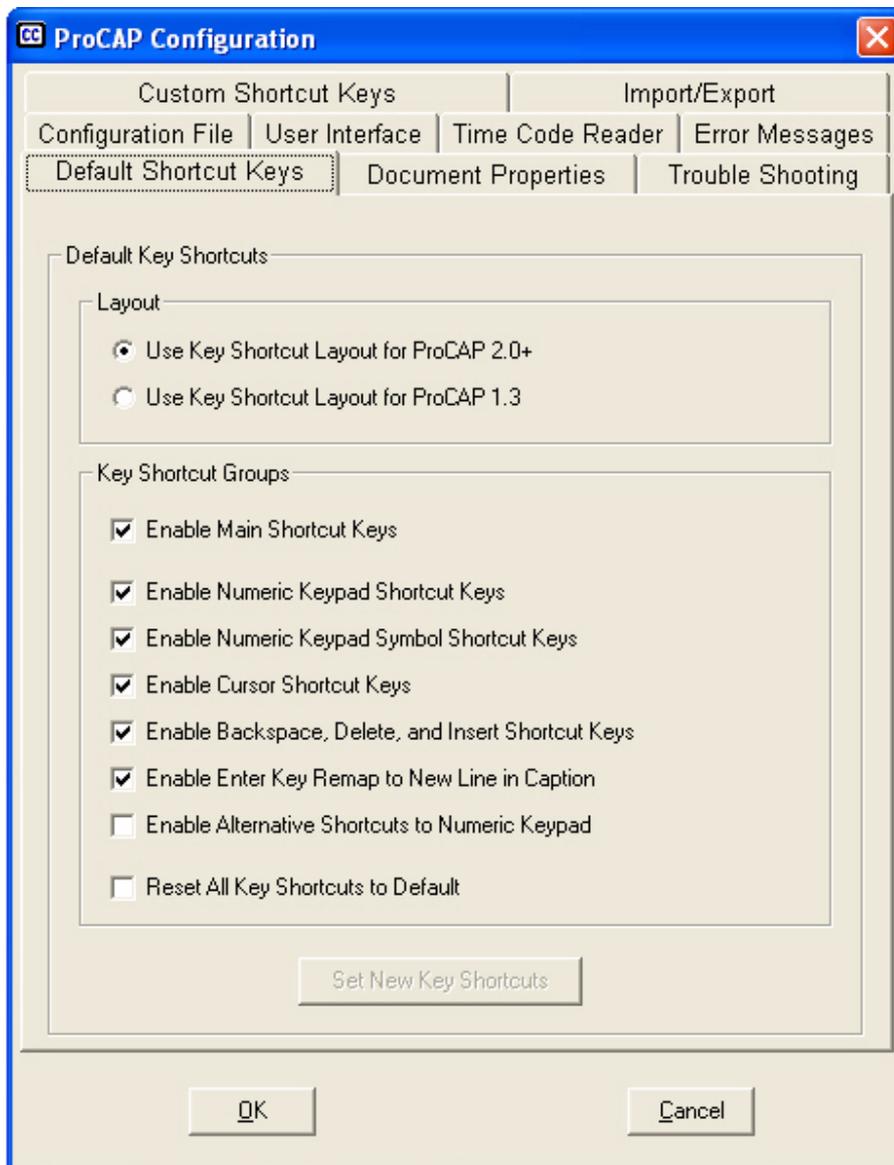
## Captions Exceeding Target Number Of Lines

The current configuration file defines the target number of lines for each caption style. The **Captions Exceeding Target Numbers Of Lines** can be set as follows:

- **Ignore** - disables all checking for captions exceeding the target number of lines.
- **Report** - generates a warning message for each caption with more lines than the target number of lines. For further information refer to Exceeding Target Lines within the manual.
- **Auto-Split (If Not Truncated)** - Auto-Split is performed on each caption with more lines than the target number of lines. Captions that would be truncated are not handled here, but separately by the **Auto-Correct Auto-Split on Truncation Warning** above.



## Default Shortcut Keys



Default keyboard shortcut keys have been assigned in ProCAP to facilitate captioning. A listing of the keyboard shortcut keys is available within Appendix C **ProCAP 2.0 Default Keyboard Shortcuts**.

### Layout

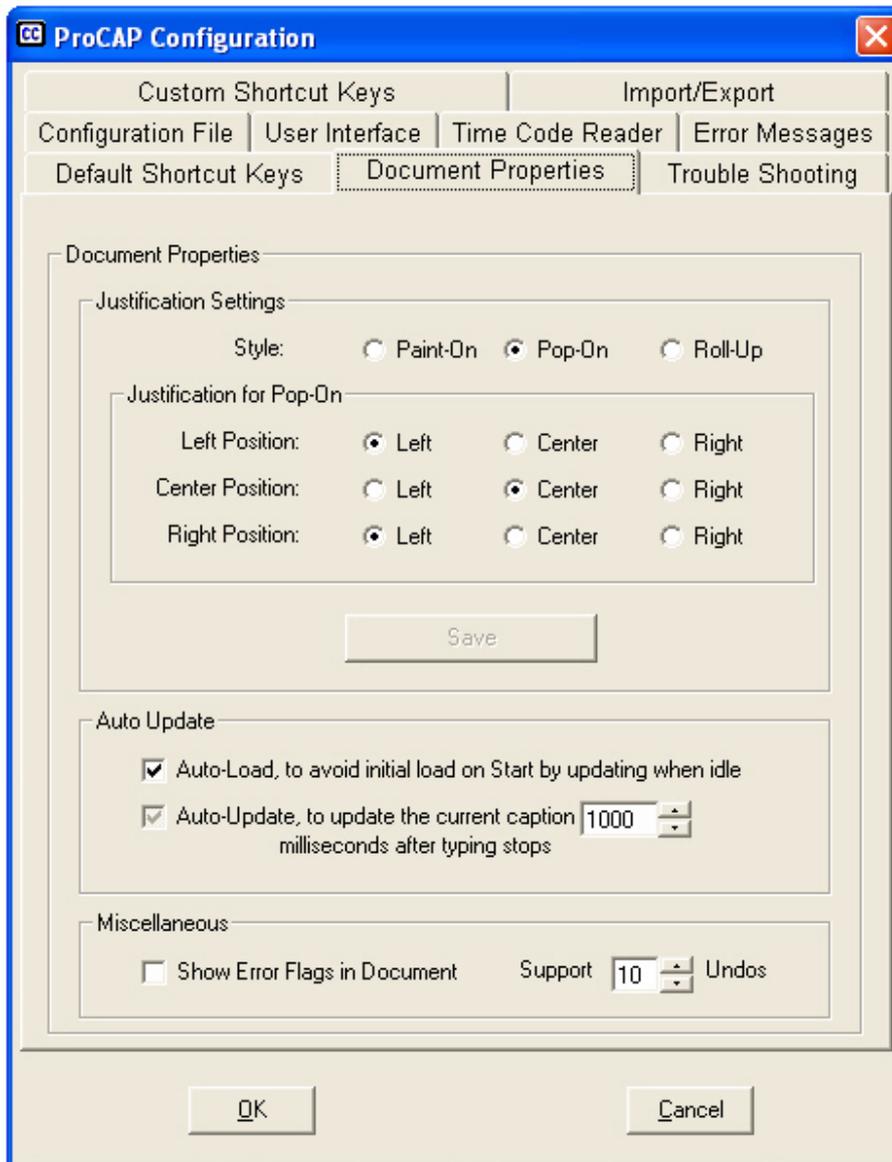
Depending on the version of ProCAP software running, captionists can choose the Key Shortcut Layout that applies.

## Key Shortcut Groups

Most of the common functions have been mapped to the numeric keypad. For example, **Num 0** is a toggle between play and stop, **Num Enter** assigns the current caption timecode, **Num 2** and **Num 8** are play forward and play reverse. A pictorial representation of the numeric keypad shortcut keys is available in the Keyboard Numpad Shortcuts section of the manual.

Shortcut keys can be changed and new keys assigned. For more information about reassigning keys, refer to the Shortcut Key Assignment section of the manual.

## Document Properties



## Document Properties

The default justification settings for positioning within the ProCAP document are set here. To change the default settings, check the applicable style (Paint-On, Pop-On or Roll-Up) and chose the **Justification Setting** required.

 These setting are saved with the document and are restored every time the document is opened.

## Auto Update

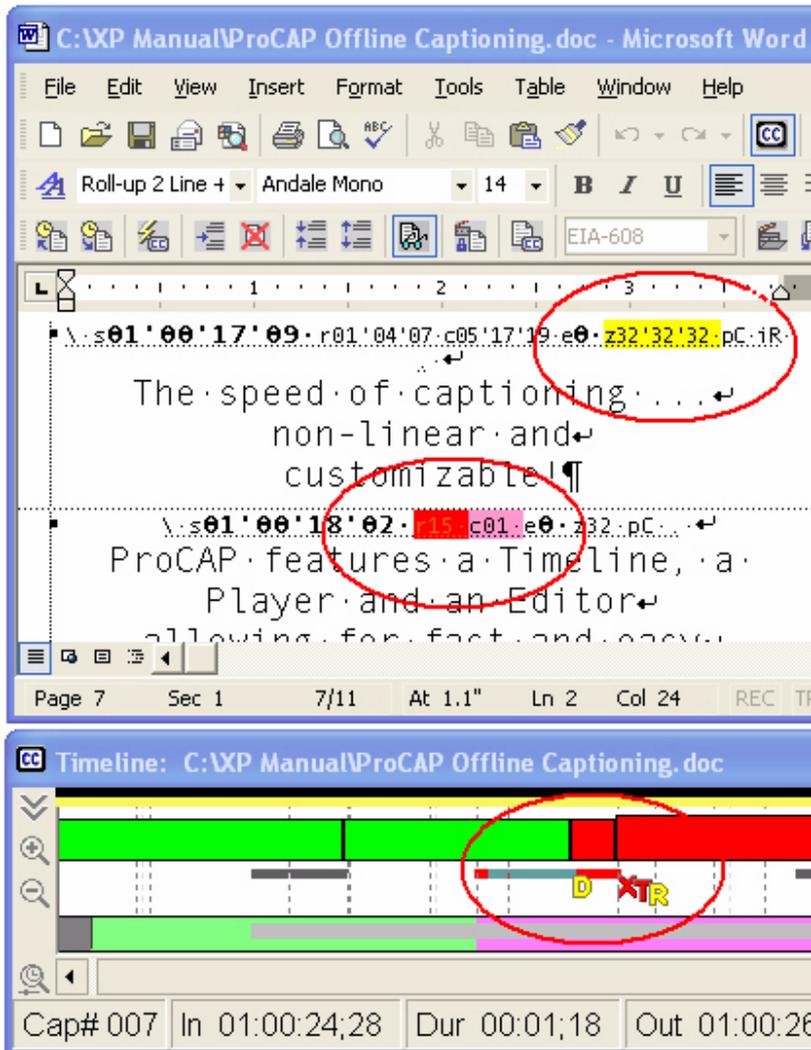
The default is to load the caption information when the system is idle, allowing users to start working on the documents immediately and reduce the time when opening the file to create a Transfer File.

## Miscellaneous

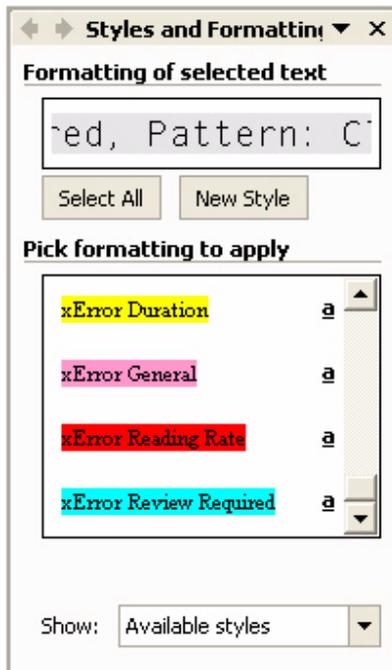
**Show Error Flags in Document** - Errors are always reported on the Timeline. These errors can also be flagged in the captions within the document by selecting this option.

In the example below the following errors are depicted:

Error	Showing Within the Editor	Shown Within the Timeline
Caption below Minimum Duration	Highlighted in yellow	<b>D</b>
Transmission Error	Highlighted in pink	<b>X</b>
Truncation Error	Highlighted in pink	<b>T</b>
Reading Rate Error	Highlighted in red	<b>R</b>



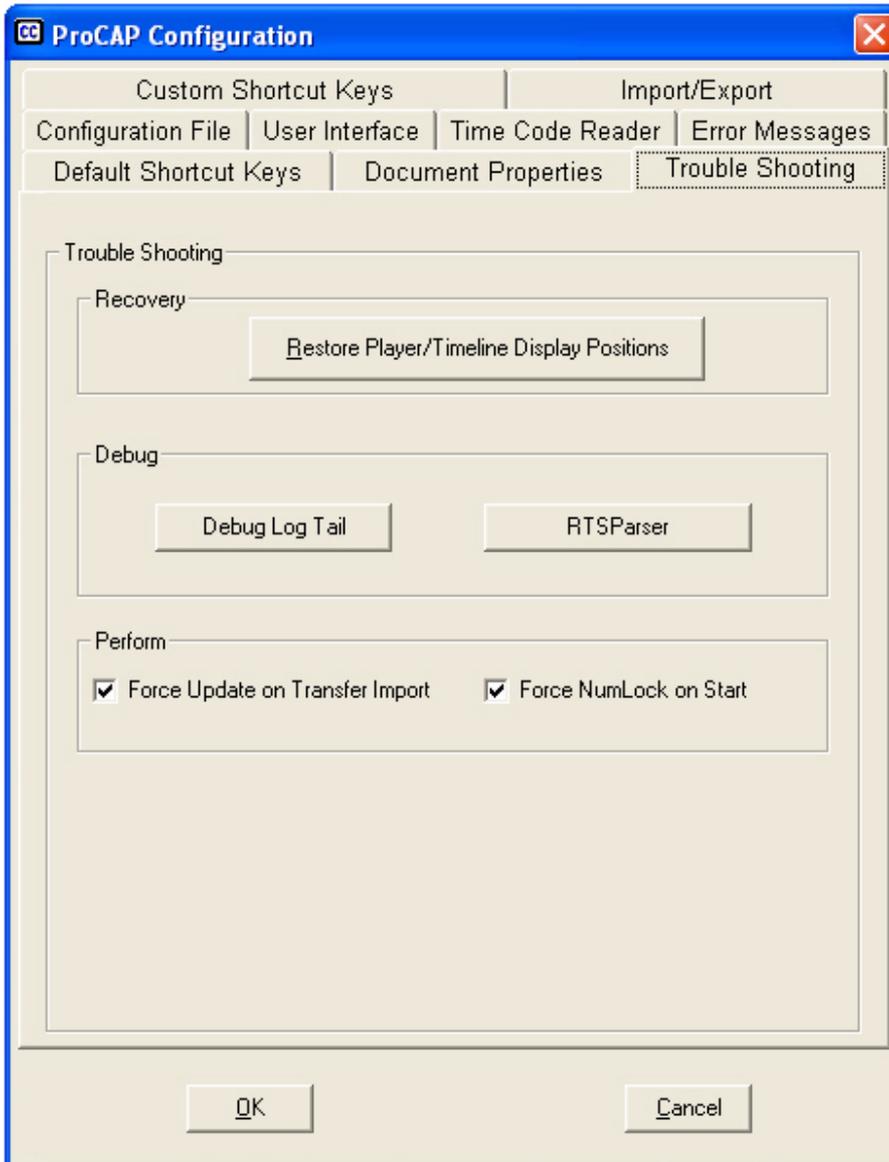
Captionists can change the colors depicted in the Preamble by executing **Format** → **Styles and Formatting** and choosing the **xError**.



## Support

Within this menu, captionists can adjust the default number of undo commands.

# Trouble Shooting



**Recovery** - pressing **Restore Player / Timeline Display Positions** button will restore / recover the Player or Timeline should they inadvertently move off the screen.

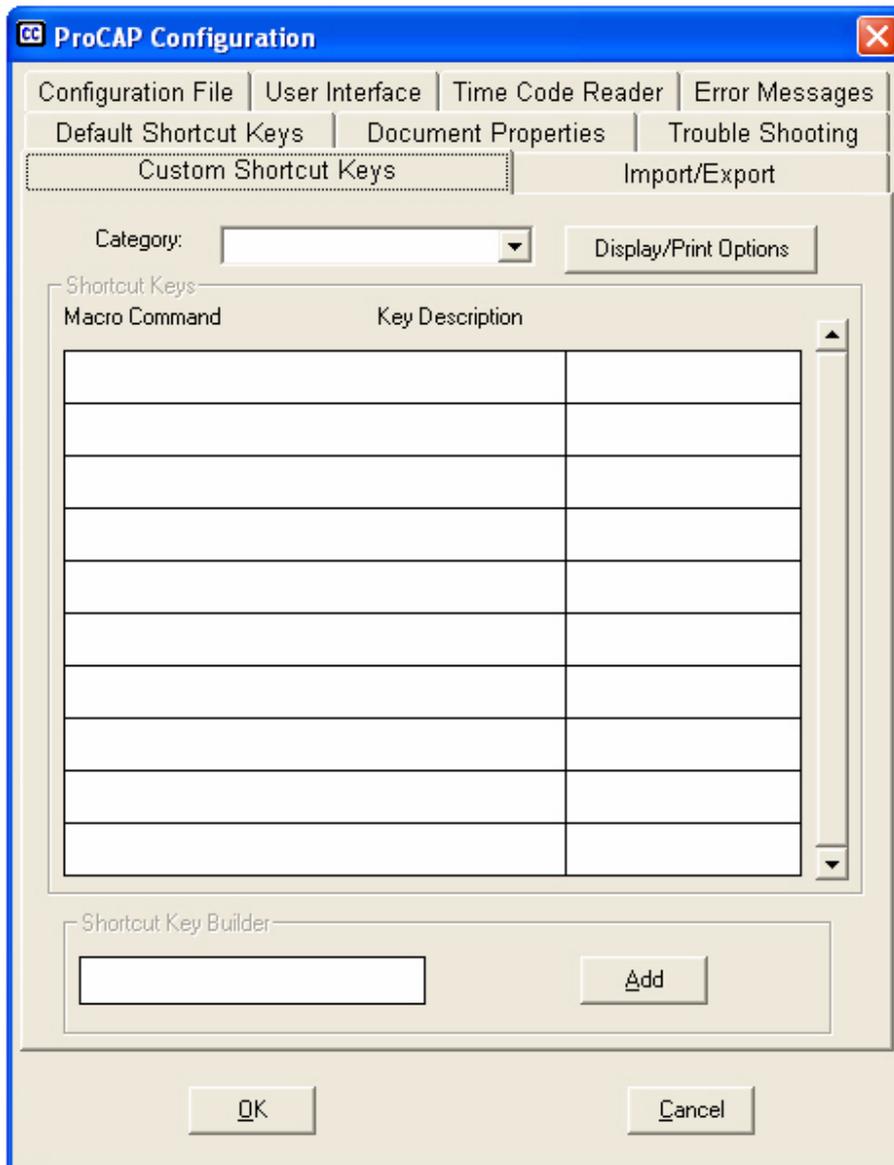
This may happen if the ProCAP system is run at a very high resolution display, and then restarted at a very small resolution, such as after the installation of a new video adapter, occasionally the Player or the Timeline will not be visible on the screen.

**Debug** - this is for internal use only.

**Perform** - these settings are defaulted to ensure:

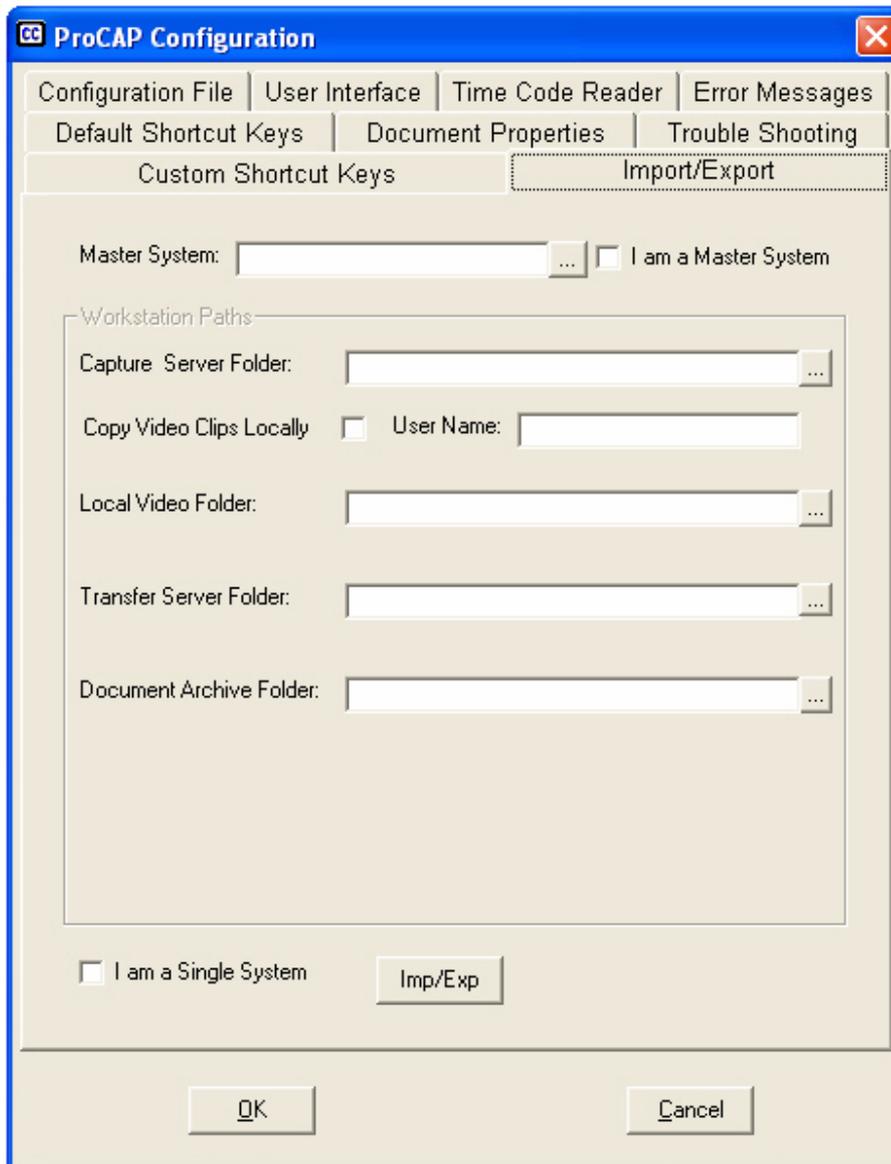
- captions are updated and verified prior to importing a transfer file through the Transfer Application
- ProCAP will turn on the NumLock key so that the Numeric Keypad can be used for shortcut keys.

## Custom Shortcut Keys



This feature is currently disabled.

## Import/Export



This feature is currently disabled.

## **Importing Different Caption Formats**

## Support for Other Caption Formats

Currently ProCAP supports the following other caption formats:

- Cheetah .CAP
- TDS format
- NCI format

 In the current releases, only the Cheetah .CAP format is capable of import and export - the other formats are import only.

In addition to these formats, you can export a standard script file that is printable and ready for proofing.

## Importing Cheetah Files

To import a Cheetah .CAP caption file, execute **File** → **Import Cheetah** from the Word main menu. Use the **Open** dialog box to browse to and select the Cheetah .CAP file you wish to import. Press the **Open** button to start the import operation.

The progress of the Cheetah .CAP import process is displayed and can be aborted.

 Currently, ProCAP only supports import of the Cheetah Version 2 .CAP binary files.

The **Target Standard** of the imported Cheetah file is set to **Cheetah Compatibility**, by default. This ensures that when the final Transfer file is exported, the export format of the Transfer file will be the same Cheetah .CAP file format.

## **Importing NCI Files**

NCI caption files can not be imported by the ProCAP Author application for editing at this time, in accordance with NCI licensing restrictions.

NCI files can be directly imported by the Transfer application for encoding of captions to video.

## **Importing TDS Files**

TDS caption files can not be imported by the ProCAP Author application for editing at this time.

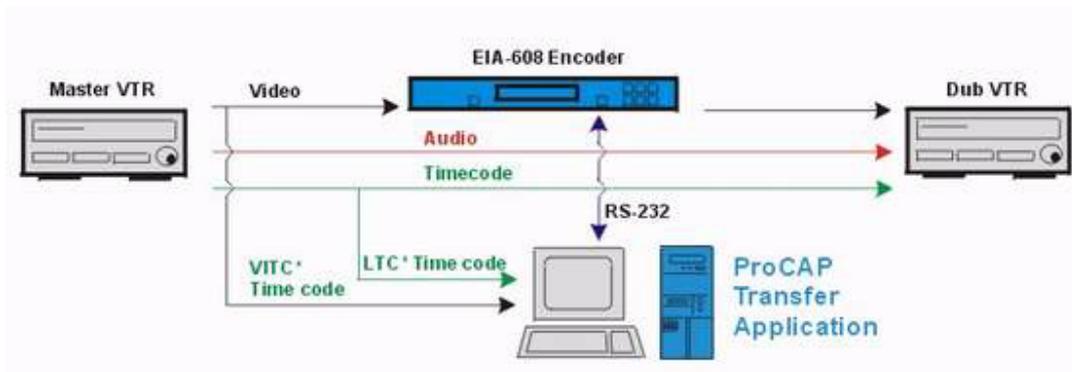
TDS files can be directly imported by the Transfer application for encoding of captions.

## **Exporting Transfer Files**

# Export Overview

## Closed Captioning

The ProCAP Editor exports completed captioned files as Transfer Files for use by the Transfer Utility. The Transfer Utility sends the contents of the transfer file to the closed caption encoder at the required times to encode the captions into line 21 of the video with frame accuracy.



\* VITC and / or LTC Time code must be supplied

For information on how to create a transfer file, refer to Creating a Transfer File in the Exporting Transfer Files section of the manual.

For information on how to export a caption file as a Cheetah .CAP file, also refer to Creating a Transfer File.

For information on how to export a caption file as a printable script, refer to Exporting a Script File.

## Subtitling

The ProCAP Editor exports completed subtitles for use by any mainstream DVD Authoring Utility.

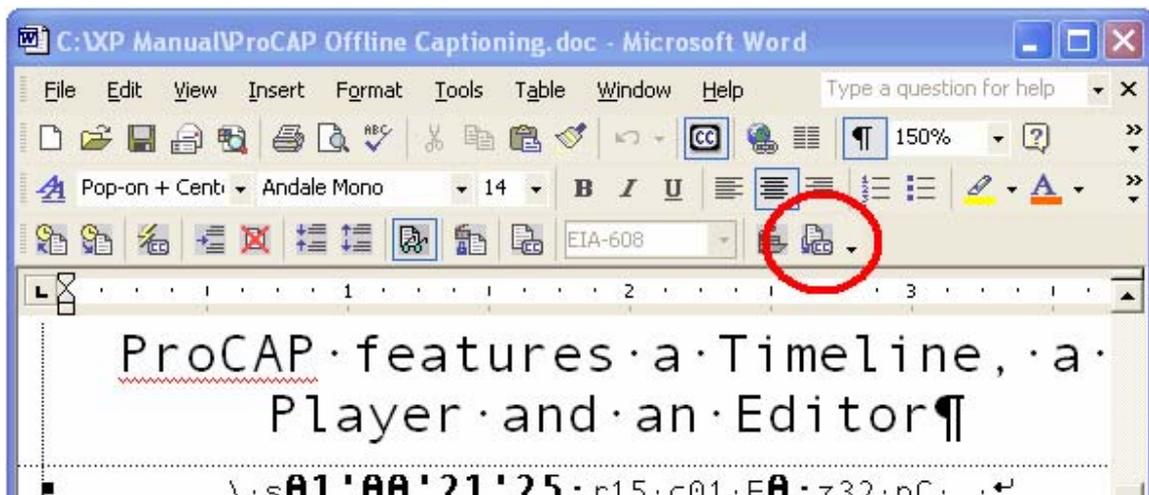
For information on how to create DVD subtitles, refer to Creating a Transfer File in the Exporting Transfer Files section of the manual.

For information on how to export a subtitled file as a text or printable script, refer to Exporting a Script File.

## Creating a Transfer File

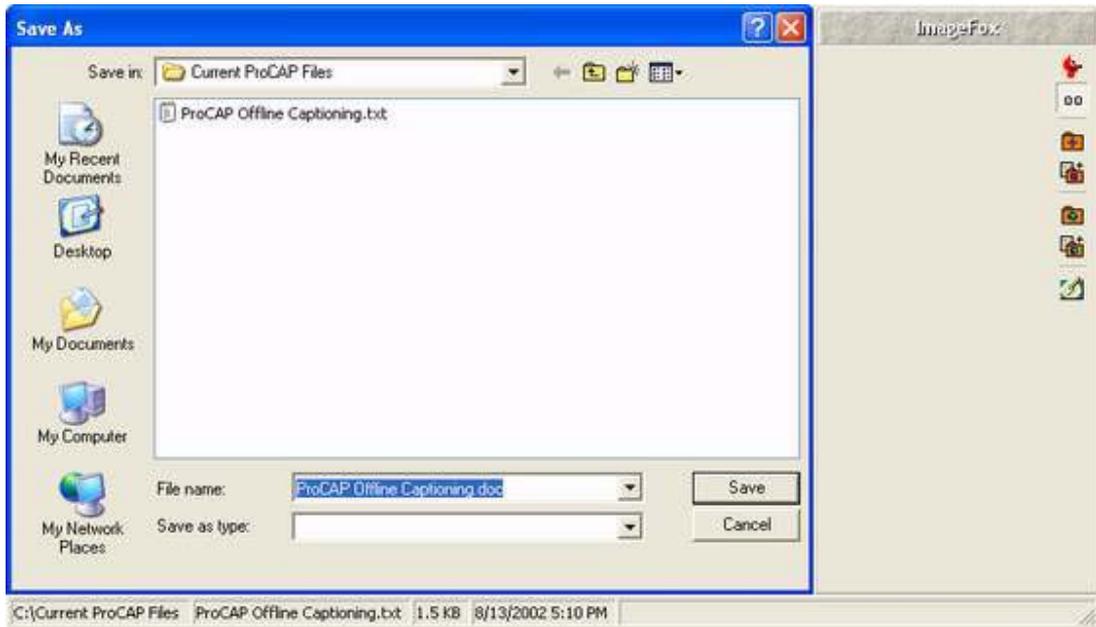
Creating a Transfer File is last step in the captioning / subtitling process. After all the captions have been assigned and previewed, a Transfer File can be created by:

- executing **F**ile → **T**ransfer
- pressing the **Create Transfer File for Encoding to Video**  command button on the ProCAP Toolbar



A complete update of all caption transmission data is done prior to creating the transfer file. This ensures that all critical errors have been fixed and warnings acknowledged before creation of the final output Transfer file.

Choose a file name to save the Transfer output file:



Users then choose the final output file format:



The options that are available are based on the Current Target Standard. To change the current Target Standard, from the Word command line in the ProCAP Editor execute **Format** → **Target Standard** and choose from EIA-608, EIA-708, FCC / Cheetah, DVD Subtitle.

## **Exporting a Script File**

You can export a script file to ease proofing the captions by executing

**File** → **Export Caption Script**. The **Export Script** dialog box opens, to allow for customization of the export format.

**Export Script**

**Caption/Subtitle Number**

Include Caption/Subtitle Numbers. Numbers Followed By... <New Line>

Use Caption Numbers from ProCAP. Numbers always show 2 Digits.

**Display Time Code**

Include In-Point. In-Points Followed By... <New Line>

Include Out-Point. Out-Points Followed By... <New Line>

**Time Code Format**

hh  mm  ss  ff

**Captions/Subtitles To Include**

Based on Attributes:

All with No Text Attributes  All with Text Attributes

Base On Style:

All that are Always On  All that are Ignored  All Remainder Styles

Based On Time Code:

All with No Time Code  All with Time Code

**Caption/Subtitle Formatting On Output**

Preserve All Text Attributes  Enclose Italicized Text between < and >

Preserve Caption Line Breaks. For Caption Line Breaks, Use... <New Line>

Preserve Blank Lines of Text  Insert Tabs to Justify Lines of Text

**Line Spacing**

Add 0 Blank Lines Between Captions/Subtitles

Conversion Settings: Custom

OK Cancel

## Conversion Settings

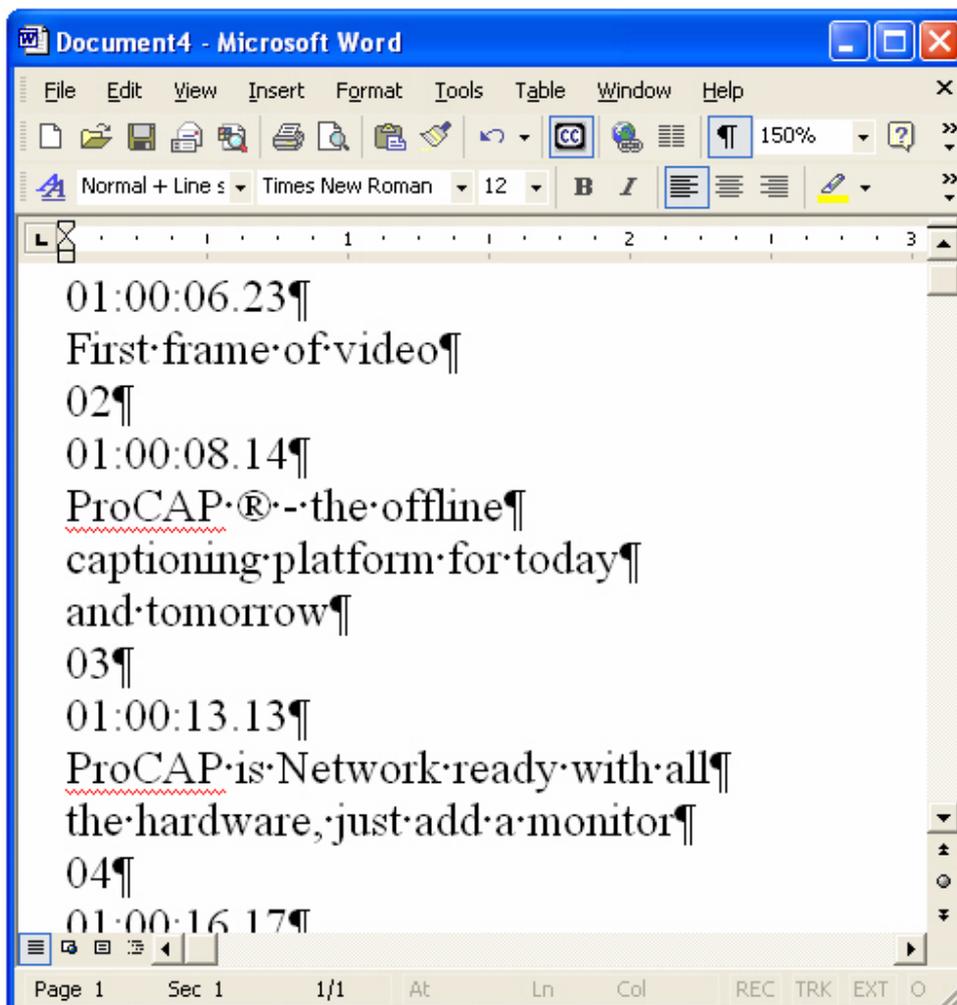
Common presets are available from the Conversion Settings list. These include Scenarist, Sonic, Spruce and plain text.

 The scripts exported by Scenarist, Sonic and Spruce options are compatible with the respective DVD Authoring Systems.

Selecting the Conversion Setting to **Custom**, allows users to have full access to all the settings. Custom settings are saved and restored with the current caption file.

Once the options have been chosen and the **OK** button is pressed, another document will be opened, and the script file will be generated as a new document in Word.

For example, an exported caption file:



 Selecting **Include Caption/Subtitle Numbers** will assist the Captionist in cross-referencing back to the original caption file. This is very beneficial when proof-reading the captioned document.

 By including caption **In-Point** and **Out-Point** in the **Export Script** dialog box, the exported file can be used in other applications such as character and subtitle generators.

 In some cases, the target application may not recognize soft-returns that are used to separate lines within a caption. By checking the **Preserve Caption Line Breaks** within the **Caption/Subtitle Formatting On Output** option, users can choose what the soft-returns will be converted to within the exported file.

 To ease readability, it may be desirable to add some white-space between captions. To do this, select **Add Blank Lines Between Captions/Subtitles** and choose the number of spaces to add.

## **Editor Problems**

## Start ProCAP Button Missing

Under some conditions the **ProCAP Start/Stop**  command button and menu entry may not be present. This can occur the first time ProCAP has been initialized, or a new update has been applied, or the procap-resident.dot file has been replaced.

Execute the ProCAP macro **ToolsProCAPStartStop** to restore the standard **ProCAP Start/Stop** button.

To run the ProCAP macro, from the Word menu, execute **Tools** → **Macro** → **Macros**, select **ToolsProCAPStartStop**, and execute **Run**. This will start ProCAP, allowing ProCAP to restore all of its buttons and toolbars.

If the **ProCAP Start/Stop button** is still not visible, then the eia608.dot or normal.dot template files have been corrupted and need to be replaced. For further information about how to replace these files refer to Templates within the Word Compatibility Section of the manual.

## ProCAP not starting due to Macro Security Problems

If the macro virus protection level is set to high, running the ProCAP macro will sometimes trigger the following message.



Press **OK** and start ProCAP again. This message should not re-appear.

## **Video Problems**

Q: When playing back video, the video seems choppy, is it dropping frames?

A: No. If during the recording, there were no dropped frames, the playback will not result in dropped frames. The choppy video is due to the way Windows Media Player buffers the video stream. This may be due to the background updates on the Timeline after entering Preview Mode, as indicated by the 'U' on the Timeline's status bar.

## Word Freezes

Word may appear to freeze during captioning. Some of the more common reasons recoveries are:

- The **Alt** key was pressed by itself. By default, when the **Alt** key is pressed, the main menu of Word is activated, so that it may be navigated from the keyboard. Visually, the **File** menu entry will turn into a button. To get the cursor back into the current document in Word, press the **Alt** key again by itself or press the **Esc** key.
- Word may be Auto-saving the document. Depending on where the document resides, this may take some time. Word gives little indication that this operation is in progress, or the status of it. Wait a reasonable time for the operation to complete. If the operation does not complete, press **Ctrl + Alt + Del**, go to the **Task Manager**, select the **Word** application, and execute **End** to close the process.
- Word may take a long time on open, close, save, or ProCAP start, if you are working across a network. Network problems such as congestion or shared resources or servers being temporarily unavailable can cause the Windows operating system to "freeze" until the operation times out. Waiting a reasonable amount of time will usually result in an error message, allowing you to continue.
- A known bug in Word will occasionally freeze Word from all input. To recover, click on the current running Word icon on the task bar to minimize it. Click on it again to maximize. This will cause Word to reset its input and restore operation. This same bug may, under certain conditions, repeat the last key pressed many times before freezing. The Undo operation will usually recover from this after input control has been regained.

# ProCAP Windows Hidden

Occasionally the ProCAP Player or Timeline will not be visible on the screen. This may happen if the ProCAP system is run at a very high resolution display, and then restarted at a very small resolution, such as after the installation of a new video adapter.

To recover, execute **Tools** → **ProCAP Configuration**, and go to the **Trouble Shooting** tab in the menu. Pressing **Restore Player / Timeline Display Positions** button will restore / recover the Player or Timeline should they inadvertently move off the screen.

For further information refer to the Trouble Shooting section of the manual.

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