



DV Toolkit 2TM

Version 7.3



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chapter 1

Introduction

The DV Toolkit 2™ software option provides post production features and other enhancements to Pro Tools LE™ systems.

 *For information on standard Pro Tools LE features, refer to the Pro Tools Reference Guide.*

What's Included

The DV Toolkit 2 package contains the following components:

- Pro Tools LE Installer disc, which contains Pro Tools LE software, DV Toolkit 2 software components, DigiRack RTAS (Real-Time AudioSuite) and AudioSuite plug-ins, and electronic PDF guides
- TL Space Installer discs
- Activation Card, with Activation Code and instructions for authorizing DV Toolkit 2 software components using an iLok USB Smart Key (not supplied)
- Digidesign Registration Information Card

System Requirements

To use DV Toolkit 2, you need:

- ♦ An iLok USB Smart Key (an iLok.com account is also required for managing iLok licenses)
 - and –
- ♦ A Digidesign-qualified Pro Tools LE system

For complete system requirements, visit the Digidesign website (www.digidesign.com).

Compatibility Information

Digidesign can only assure compatibility and provide support for hardware and software it has tested and approved.

For a list of Digidesign-qualified computers, operating systems, hard drives, and third-party devices, refer to the Digidesign website (www.digidesign.com).

Register DV Toolkit 2 for Pro Tools LE

Review the enclosed card and follow the instructions on it to quickly register your purchase online. Registering your purchase is the only way you can be eligible to receive complimentary technical support and future upgrade offers. It is one of the most important steps you can take as a new user.

DV Toolkit 2 Overview

DV Toolkit 2 enables the following features for working with audio, film, video, or digital video in Pro Tools LE:

- Session and track features:
 - Support for multiple video tracks on the Timeline, multiple QuickTime movies per track, and multiple playlists per track
 - Playback or recording of up to 48 mono or stereo audio tracks simultaneously
 - Ability to use QuickPunch on up to 24 tracks simultaneously
 - Support for Video Import Options
 - Import Session Data options (Destination Track Names, Time Code Mapping, Find Matching Tracks, Session Data to Import, Track Playlist)
 - Enabling of all DigiTranslator features, including export of AAF sequences at HD Frame Rates
 - MP3 export option (for bounce recording or exporting a region as an MP3 file)
 - DigiBase Pro (including support for Catalog browsers and the ability to search on multiple criteria simultaneously in DigiBase browsers)
- Editing features:
 - Support for adding and editing multiple video regions
 - General video editing
 - Video region groups
 - Universe window
 - Continuous Scroll
 - Scrub Trim tool
 - Replace Region command
 - TCE Edit to Timeline Selection command
 - Selection of alternate field recorder audio channels in the Pro Tools Timeline
 - Expanding alternate field recorder channels to new tracks
 - 1/2 frame grid and nudge
- Mixing and Automation features
 - Snapshot automation for writing or trimming automation data
 - Glide Automation commands
- Time code and synchronization features:
 - Timebase rulers (Time Code, Time Code 2, and Feet+Frames)
 - Time Code Rate selector
 - Feet+Frame Rate selector
 - Current Time Code Position command
 - Current Feet+Frames Position command
 - Use Subframes option
 - Audio Rate Pull Up and Pull Down
 - Video Rate Pull Up and Pull Down

Additional Software

DV Toolkit 2 includes the following additional software for working with audio or digital video in Pro Tools LE:

DINR™ (Digidesign Intelligent Noise Reduction™) LE Plug-in For reducing noise in audio.

DigiTranslator™ Software Option For exchanging audio and video files, and sequences with other AAF and OMFI-compatible applications.

TL Space Native™ Convolution Reverb Plug-in For applying convolution reverbs to your audio.


VocAlign Project Plug-in from Synchro Arts Software For automatically adjusting the timing of one audio signal to match another.


Conventions Used in This Guide


All Digidesign guides use the following conventions to indicate menu choices and key commands:


Convention	Action
File > Save	Choose Save from the File menu
Control+N	Hold down the Control key and press the N key
Control-click	Hold down the Control key and click the mouse button
Right-click	Click with the right mouse button

The following symbols are used to highlight important information:

 *User Tips are helpful hints for getting the most from your Pro Tools system.*

 *Important Notices include information that could affect your Pro Tools session data or the performance of your Pro Tools system.*

 *Shortcuts show you useful keyboard or mouse shortcuts.*

 *Cross References point to related sections in this guide or other Pro Tools Guides.*

About www.digidesign.com

The Digidesign website (www.digidesign.com) is your best online source for information to help you get the most out of your Pro Tools system. The following are just a few of the services and features available.

Registration Register your purchase on-line. See the enclosed registration form for instructions.

Support Contact Digidesign Technical Support or Customer Service; download software updates and the latest online manuals; browse the Compatibility documents for system requirements; search the online Answerbase or join the worldwide Pro Tools community on the Digidesign User Conference.

Training and Education Study on your own using courses available online or find out how you can learn in a classroom setting at a certified Pro Tools training center.

Products and Developers Learn about Digidesign products; download demo software or learn about our Development Partners and their plugins, applications, and hardware.

News and Events Get the latest news from Digidesign or sign up for a Pro Tools demo.

To learn more about these and other resources available from Digidesign, visit the Digidesign website (www.digidesign.com).

chapter 2

Installation

Installing DV Toolkit 2

A *A Digidesign-qualified version of Pro Tools LE must be installed before you install your toolkit and authorize its software components.*

Install Pro Tools LE according to the instructions in your Pro Tools Getting Started Guide. Then, return to this guide and complete the instructions in this chapter to install and authorize the DV Toolkit 2 option and its software components.

To install DV Toolkit 2:

- 1** Insert the Pro Tools Installer disc for your version of Pro Tools into your computer.
- 2** Locate and double-click the DV Toolkit 2 installer icon.
 - DV Toolkit 2 Setup.exe (Windows)
 - or –
 - Install DV Toolkit 2 (Mac)
- 3** Follow the on-screen instructions to complete the installation.
- 4** When installation is complete, click Finish (Windows) or Quit (Mac).

The installer process installs DV Toolkit 2 features (including the MP3 export option), as well as any of the following optional components that you chose to install:

- DigiTranslator
- DINR LE
- VocAlign Project

A *TL Space Native must be installed separately. See “Installing TL Space Native” on page 6.*

5 Each software component (including DV Toolkit 2) must be authorized before it can be used. See “Authorizing DV Toolkit 2 Option” on page 6.

A *If you launch Pro Tools without authorizing a DV Toolkit 2 software component, you will be prompted to authorize the component during the launch.*

Installing TL Space Native

To install the TL Space Native plug-in and factory impulse responses:

- 1 Insert the TL Space Installer disc into your computer.
- 2 Locate and double-click the TL Space Native installer icon.
- 3 Follow the on-screen instructions.
- 4 When installation is complete, click Finish (Windows) or Quit (Mac).
- 5 Before you can use TL Space Native, you need to authorize it. See “Authorizing DV Toolkit 2 Option” on page 6.

To install the TL Space Native Impulse Response Library:

- 1 Insert the TL Space Impulse Response Library disc into your computer.
- 2 Locate and click the TL Space Native installer icon.
- 3 Follow the on-screen instructions.
- 4 When installation is complete, click Finish (Windows) or Close (Mac).

Authorizing DV Toolkit 2 Option

DV Toolkit 2 and its additional software components must be authorized before they can be used in Pro Tools. Refer to the following sections:


- “DV Toolkit 2 and Additional Software Components” on page 6
- “MP3 Export Option” on page 7

DV Toolkit 2 and Additional Software Components

Each DV Toolkit 2 software component must be authorized before it can be used in Pro Tools. Authorization includes activating your software licenses online, then transferring your licenses to an iLok USB Smart Key (iLok).


The iLok is similar to a dongle, but unlike a dongle, it is designed to securely authorize multiple software applications from a variety of software developers.

This key can hold over 100 licenses (or authorizations) for all of your iLok-enabled software. Once an iLok is authorized for a given piece of software, you can use the iLok to authorize that software on any computer.

 *The iLok USB Smart Key is not supplied with the DV Toolkit 2 package, and must be purchased separately.*

Licenses are specific to each software component. You will receive the appropriate licenses online, after you have activated your licenses using the Activation Code on the DV Toolkit 2 Activation Card.

DV Toolkit 2 provides one Activation Card with one Activation Code for all DV Toolkit 2 components.

 *For additional information about iLok technology and licenses, see the electronic PDF of the iLok Usage Guide.*

The following DV Toolkit 2 software components must be authorized before they can be used in Pro Tools LE:

- DV Toolkit 2 (includes Pro Tools features)
- DINR LE
- DigiTranslator
- TL Space Native
- VocALign Project from Synchro Arts

To authorize DV Toolkit 2 software components with iLok:


1 If you do not have an existing iLok.com account, visit www.iLok.com and sign up for a free iLok.com account.

2 Transfer your DV Toolkit 2 iLok licenses into your iLok.com account by doing the following:

- Visit <http://secure.digidesign.com/activation>.
- Input your Activation Code (listed on your Activation Card) and your iLok.com User ID. Your iLok.com User ID is the name you create for your iLok.com account.

3 Transfer the licenses from your iLok.com account to your iLok USB Smart Key by doing the following:

- Insert the iLok into an available USB port on your computer.
- Go to <http://www.iLok.com> and log in.
- Follow the on-screen instructions for transferring your licences to your iLok.

 *For information about iLok technology and licenses, see the electronic PDF of the iLok Usage Guide.*

4 Launch Pro Tools.

5 If you have any installed unauthorized plugins or software options, you will be prompted to authorize them. Follow the on-screen instructions to complete the authorization process.

MP3 Export Option

The Digidesign MP3 export option must be authorized the first time you export a region or do a bounce recording to an MP3 file.

To authorize the MP3 export option:

1 Launch Pro Tools.

2 Open a session.

3 Do one of the following:

- Click on a region and choose Region List > Export Regions as Files.
- or –
- Make an Edit selection and choose Bounce to > Disk.

4 Select MP3 as the File Type.

5 Click Export (in the Export dialog) or Bounce (in the Bounce to Disk dialog).

6 In the Pro Tools MP3 Option dialog, click Authorize.

A *If Authorize is grayed out, you need to uninstall DV Toolkit 2 and reinstall it, making sure to select the MP3 option in the installer.*

7 When prompted, type in the Pro Tools MP3 authorization code, which is included with your DV Toolkit 2 package.

8 Click Next and follow the on-screen instructions to complete the authorization process.

Removing Toolkit Options and Plug-ins

DV Toolkit 2 or any of its optional software components can be removed from your system.

Uninstalling DV Toolkit 2 removes all components except TL Space Native, which must be removed separately. See “Uninstalling TL Space Native” on page 8.

Uninstalling DV Toolkit 2 Components

Windows

To remove DV Toolkit 2 on Windows XP:

- 1 Choose Start > Control Panel.
- 2 Double-click Add or Remove Programs.
- 3 From the Currently installed programs list, select Digidesign DV Toolkit 2.
- 4 Follow the on-screen instructions.
- 5 When removal is complete, close the Add or Remove Programs window.

Mac

To remove DV Toolkit 2 on Mac:

- 1 Locate and open the Pro Tools folder (Applications/Digidesign/Pro Tools).
- 2 Drag the following components to the Trash:
 - DVToolkit2.bundle
 - OMF.bundle
- 3 Locate and open the Codecs folder (Applications/Digidesign/Pro Tools/Codecs).
- 4 Drag the MP3 folder (containing MP3.bundle) to the Trash.
- 5 Locate and open the Plug-ins folder on your Startup drive (Library/Application Support/Digidesign/Plug-ins).
- 6 Drag the following plug-ins to the Trash:
 - DINR LE
 - TL Space Native
 - VocAlign Project
- 7 Empty the Trash.

Uninstalling TL Space Native

Windows

To remove the TL Space Native plug-in and factory impulse responses:

- 1 Choose Start > Control Panel.
- 2 Double-click Add or Remove Programs.
- 3 Select TL Space from the list of installed applications.
- 4 Click the Change/Remove button.
- 5 Click OK to remove the plug-in.
- 6 When removal is complete, close the Add or Remove Programs window.

Mac OS X

To remove the TL Space plug-in:

- 1** Locate and open the Plug-ins folder on your Startup drive (Library/Application Support/Digidesign/Plug-ins).
- 2** Do one of the following:
 - Drag the TL Space plug-in file to the Trash and empty the Trash.
 - or –
 - Drag the TL Space plug-in file to the Plug-ins (Unused) folder.


To remove the TL Space Native impulse response library:

- 1** Locate the TL Space Impulse Responses folder (Library/Application Support/Trillium Lane/TL Space).
- 2** Drag it to the Trash and empty the Trash.

chapter 3

Session and Track Features

DV Toolkit 2 enables additional session and track features (including DigiBase Pro) for working with audio, film, video, or digital video in Pro Tools LE. It also includes support for the MP3 export option.

 *For more information on working with Pro Tools sessions and tracks, see the Pro Tools Reference Guide.*

Video Track Support

DV Toolkit 2 adds the following video track support to Pro Tools LE:

- Multiple video tracks in the Timeline
- Multiple QuickTime movies on individual video tracks
- Multiple playlists for video tracks

Multiple Video Tracks in the Timeline

You can add multiple video tracks to the Timeline, but only one video track can be played back at a time.

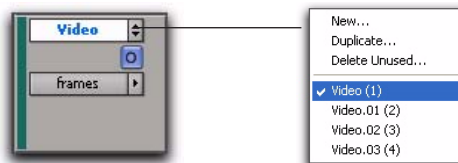
Multiple QuickTime Movies on Individual Video Tracks

You can add multiple QuickTime movies to any individual video track. QuickTime video data appear in the Timeline as video regions.

 *See “Support for Editing Multiple Video Regions” on page 25.*

Multiple Video Track Playlists


Playlists provide an easy way of changing between alternate versions of a video track.



Playlist selector

You can perform all of the same operations with video playlists as you can with audio playlists, including:


- Duplicating a playlist
- Creating a playlist
- Assigning a playlist to another video track
- Renaming a playlist
- Deleting a playlist

 *See the Pro Tools Reference Guide for detailed information on playlists.*

Support for 48 Mono or Stereo Tracks

DV Toolkit 2 lets you play or record up to 48 simultaneous stereo or mono tracks. Higher track counts are only supported with multiple hard drives and faster Digidesign-qualified systems. Visit the Digidesign website for more information (www.digidesign.com).


The first 48 audio tracks that are active *and* have their voice assignment set to DYN (Dynamically Allocated Voicing) play back. Tracks which occur after these 48 tracks do not play back and cannot be recorded on. Their Dynamically Allocated Voicing button will be blue to indicate they are unavailable for playback or record.

 *Tracks do not play back when they are inactive or their voice assignment is set to Off.*

When working with more than 48 audio tracks, you can play back audio in tracks 49 and higher by changing the higher track's priority, as follows:


- Make a lower track inactive (click the Track Name and select Track > Make Inactive).
- Set the voice assignment in a lower track to Off (click the Voice selector and select Off).
- Drag the Track Name button of the higher track to the left (Mix window) or upwards (in the Edit window or Track List) until it is one of the first 48 audio tracks. The previous 48th audio track will become the 49th audio track and its voice assignment will change to Off.

If the original track 49 (or higher) had its voice assignment set to Off, it will automatically be reset to DYN when you do any of the above steps.

 *For more information on track priority and voice assignment, see the Pro Tools Reference Guide.*


Pro Tools LE System Capabilities


Pro Tools LE with DV Toolkit 2 still supports all other Pro Tools LE system capabilities (such as 128 available audio tracks, 128 Auxiliary inputs, 32 Instrument tracks, and 256 MIDI tracks).

 *For additional Pro Tools LE system capabilities, see the Pro Tools Reference Guide.*

Support for Up to 24 QuickPunch Tracks

With DV Toolkit 2, up to 24 mono or stereo audio tracks can be simultaneously recorded with QuickPunch.

 *The combination of audio tracks and QuickPunch tracks cannot be greater than 48.*

 *For information on recording with QuickPunch, see the Pro Tools Reference Guide.*

Support for Video Import Options

DV Toolkit 2 adds the following options to Pro Tools LE when using the Video Import Options dialog to import video into Pro Tools:

Destination Section

Region List Imports the video file directly into the Region List, where it will be available to drag and drop into Pro Tools.

Additional Video Import Options

Gaps Between Regions When you import more than one video file into a track, they will be shuffled together by default. This option lets you indicate the number of seconds by which each video clip will be separated when imported into the video track.

Bypassing the Video Import Options Dialog

To bypass the Video Import Options dialog when importing video into Pro Tools:

- Alt-drag (Windows) or Option-drag (Mac) one or more video files from a DigiBase browser into the Region List.

Dragging Video Files from the Region List to the Timeline

Pro Tools LE with DV Toolkit 2 lets you add QuickTime movies to the Timeline by dragging and dropping directly from the Region List to a video track.

To add video files to a video track by dragging them from the Region List:

- 1 Select one or more video files in the Region List.
- 2 In any Edit mode, drag the selected video files to a blank area in the Timeline (to create a new video track) or an existing video track (to place it within that track).

Import Session Data Enhancements

This section provides information on Import Session Data features that DV Toolkit 2 adds to Pro Tools LE systems.

The Import Session Data dialog lets you view the properties of a session, select which tracks to import, and with DV Toolkit 2 or Pro Tools HD, choose which attributes of those tracks you want to import into the current session.

Time Code Mapping Options

You can specify where the imported tracks are placed in the current session. Times are indicated in time code for Pro Tools|HD and Pro Tools LE with DV Toolkit 2 systems, and minutes:seconds for other Pro Tools LE systems.

From the Import Session Data dialog, the following Import Mapping Options are available:

Maintain Absolute Time Code Values This option places tracks at the locations where they were located in the source session. For example, if the current session starts at 00:01:00:00, and the session from which you are importing starts at 10:00:00:00, the earliest imported tracks can appear in your session is 9 hours and 59 minutes after the start of the session.

Maintain Relative Time Code Values This option places tracks at the same offset from session start as they had in the source session. For example, if the source session starts at 01:00:00:00 and contains a track that starts at 01:01:00:00, and the current session start is 02:00:00:00, the track will be placed at 02:01:00:00 in the current session.

Map Start Time Code To This option places tracks relative to their original session start time. (With Pro Tools|HD or Pro Tools LE with DV Toolkit 2 systems, times are expressed in hh:mm:ss:ff, and on Pro Tools LE systems, times are expressed in mm:ss.) For example, if the current session starts at 00:01:00:00, and the session from which you are importing starts at 10:00:00:00, you can reset the start time code to 00:01:00:00, to avoid placing files 9 hours and 59 minutes from the start of your session.

Destination Track Names (Operation/Destination Track Pop-Up Menus)

For each source track, there is a corresponding Operation/Destination Track pop-up menu that lists options for importing the track and available destination tracks in the current session.

The names of available destination tracks in the current session are listed at the bottom of the pop-up menu. Imported playlists and all attributes selected in the Session Data to Import will be placed in the destination track you choose.

Only destination tracks that match the track type (audio, Instrument, MIDI, Auxiliary Input, or Master Fader) and the channel format (mono or stereo) of the source track appear in the pop-up menu.

Find Matching Tracks

If you are importing playlists from source tracks with the same name as destination tracks in the current session, click Find Matching Tracks to automatically match the track names. Tracks must have the same name, track type, and channel format to be automatically matched.

Session Data to Import

The Session Data to Import menu is where you select which attributes of the selected tracks you want to import into the current session.

The selected attributes are applied to all tracks that you choose to import into the current session.

Replacing Track Attributes

When you import an attribute of the source track into an existing track in the current session, it replaces the corresponding attribute in the destination track. If you choose not to import an attribute of the source track, the corresponding attribute in the destination track is retained.

Replacing Track Path Names

When you import a track's input, output, send output or hardware insert assignments, any custom path names and I/O configurations from the source session are imported into the track, but they are not imported into the I/O Setup. Use the Import Session button in the I/O Setup dialog to import I/O configurations into the I/O Setup.



For information on importing I/O configurations into I/O Setup, see the Pro Tools Reference Guide.

Selecting Track Attributes to Import

You can select All, None, or any combination of the listed attributes to import.

The following attributes are available to import:

All Imports all of the source track's playlists, according to the Track Playlist Option setting, and all of the attributes in the Session Data to Import list.

None Imports only the source track's main playlist, according to the Track Playlist Option setting, and no other attributes of the source track.

Alternate Playlists Imports all of the source track's alternate playlists. The alternate playlists appear in the destination track's playlist pop-up menu.

Regions and Media Imports all of the audio files or regions in the source track, and places them in the Region List.

Volume Automation and Setting Imports the source track's Volume fader setting and any automation data on the track's Volume Automation playlist. The Volume fader setting and any Volume automation data in the destination track are replaced.

Pan Automation and Setting Imports the source track's Pan Slider settings and any automation data on the track's Pan Automation playlist. The Pan Slider setting and any Pan automation data in the destination track are replaced.

Mute Automation and Setting Imports the source track's Mute setting and any automation data on the track's Mute Automation playlist. The Mute setting and any Mute automation data in the destination track are replaced.

Main Output Assignments Imports the source track's channel output assignments, including any multiple output assignments. The channel output assignments in the destination track are replaced.

Send Output Assignments Imports the source track's send output assignments. Any Send output assignments in the destination track are replaced.

Plug-in Assignments Imports the source track's plug-in assignments. Any plug-ins in the destination track are removed, and their associated settings and automation are lost.

If the source track uses a plug-in that is not available on the destination system, it appears in the destination track and is made inactive.

Plug-in Settings and Automation When the source track's plug-in assignments are imported, this option imports the track's plug-in settings and any automation data associated with the plug-ins. If no plug-in assignments are imported, this option has no effect.

Hardware Insert Assignments Imports the source track's hardware Insert assignments. Any Insert assignments in the destination track are replaced.

Input Assignments Imports the source track's channel input assignment. The Input assignment in the destination track is replaced.

Side-Chain Assignments When the source track's plug-in assignments are imported, this option imports any side-chain assignments associated with the plug-ins. If no plug-in assignments are imported, this option has no effect.

I/O Labels (Path Names) Imports the source track's path names.

Track Active State Imports the active/inactive state of the source track from the source session.

Track Comments Imports the track comments associated with the source track. Any comments in the destination track are replaced.

Record Safe/Solo Safe Settings Imports the record safe and solo safe settings of the source track from the source session. Any record safe or solo safe settings in the destination track are replaced.

Track View Settings Imports the track height and playlist view of the source track from the source session.

Mix/Edit Groups: Imports track group assignments from the source session.

Track Playlist Options

You can select from the following options to control how the main playlist from each source track is imported to the destination track in the current session.

Import Main Playlists — Replacing Destination Main Playlists Imports the main playlist from the source track. When you overlay the playlist into an existing track, the main playlist in the destination track is deleted and replaced with the imported playlist.

- ◆ If you select the above option and import all of the source track's attributes, this is equivalent to importing the entire track.
- ◆ If you select the above option and do not import any of the source track's attributes, you replace the audio playlists while keeping your current mixer settings.

Import Main Playlists—Overlaying New with Existing, Trimming Existing Regions Imports the main playlist from the source track. When you import the playlist into an existing track, any existing playlist data that overlaps data imported from the source track is trimmed and replaced with the imported data. Any playlist data in the destination track that does not overlap remains in the destination track.

Do Not Import Main Playlists—Leaving Destination Playlists Intact Does not import the main playlist from the source track. No audio is imported; only the attributes selected in the Session Data to Import list are imported to the selected tracks.

- ◆ If you select the above option and import all of the source track's input, output, send, insert and plug-in attributes, this is equivalent to importing a "channel strip."

Import Tempo/Meter Map Imports the meter and tempo maps, as they appear in the Tempo and Meter Conductor rulers, from the source session. Any Tempo or Meter events in the destination session are replaced.

Import Marker/Memory Locations

Imports markers and Memory Locations as they appear in the Marker ruler, from the source session. Any markers and Memory Locations in the destination session are retained. Imported marker and Memory Locations are assigned the next available Marker/Memory Location numbers.

Export of AAF Sequences at HD Frame Rates

When exporting to an AAF sequence, Pro Tools allows HD rates as target time code formats, to ensure compatibility with Avid workstations that support HD rate AAF files. The Pro Tools Export to AAF command can export sequences at the following rates:

- 23.976 FPS
- 24 FPS
- 25 FPS
- 29.97 FPS
- 29.97 FPS Drop
- 50 FPS
- 59.94 FPS
- 59.94 FPS Drop
- 60 FPS
- 60 FPS Drop



HD projects that are interlaced have an actual frame rate that is half that implied by the format description. For example, a 1080i/50 project has a frame rate of 25 fps and thus, Pro Tools users exporting a sequence destined for this project should export a 25 fps AAF. In a progressive HD project, the true frame rate is implied in the project name. For example, a 720p/59.94 project has a frame rate of 59.94 fps and therefore Pro Tools users exporting a sequence destined for this project should export a 59.94 fps AAF.



See “DigiTranslator” on page 51 for more information.

MP3 Export Option

With DV Toolkit 2, the MP3 file type is available when using Bounce to Disk or exporting a region as a new audio file.

MPEG-1 Layer 3 (MP3)

The MPEG-1 Layer 3 compression format (MP3) is used for streaming and downloading audio over the Internet, and for playback on portable devices.

When you select this format, the Resolution (or Bit Depth) pop-up menu in the Pro Tools Bounce Options (or Export Selected) dialog is unavailable.

The sample rate chosen is given to the codec as a “base” sample rate for operations. The actual sample rate and resolution quality of the resulting file is determined by the Encoder Speed set in the MP3 Encoder Options dialog. For example, if a base sample rate of 48000 Hz is chosen, the MP3 Encoder Options dialog will allow output streams in 48 or 12 kHz, depending on the Encoding Speed setting. The Slowest setting results in a higher resolution quality, whereas the Fastest setting results in a lower resolution quality.

When you export or bounce to MP3 format, you can set the following options:

Encoder Settings

Encoding Speed Determines the audio quality of the bounced file. There are two options: Fastest and Slowest.


The Slowest setting can take up to five times longer to process audio than the Fastest Encoding setting, so you should use it only when the highest fidelity is essential and you have a considerable amount of time to devote to the encoding process.

Constant Bit Rate (CBR) Encodes the file at a single bit rate that you choose from the CBR pop-up menu. Because the bit rate is fixed, the quality of the encoded audio will vary depending on the nature of the material being compressed. This option is best for streaming over the Internet, since it has predictable bandwidth requirements.

ID3 Tag Info Settings

ID3 Tag Type The ID3 tag stores data about the encoded audio file that is used by MP3 players to display information about the file. Pro Tools supports three versions of this tag, in order to provide backward compatibility with older MP3 players:

- ID3 v1.0: Appears at the end of a streaming MP3 file, so that tag information is only displayed after software streaming is finished.
- ID3 v1.1: Same as version 1.0, but adds track number information to the tag.
- ID3 v2.3: Appears at the front of a streaming MP3 file, so that tag information is displayed when streaming begins.

 *While ID3 v2.3 is becoming the standard MP3 format, not all MP3 players currently support ID3 v2.3. Contact the developer of your player software for compatibility information.*

Title/Artist/Album/Comment Type the title, artist, and other information for the MP3 file. This information is displayed by many MP3 players.

Genre Choose a genre for the file. This information is displayed by many MP3 players, and can appear in searchable catalogs and databases.

Track Number If you select ID3 tag type v1.1 or v2.3, you can enter a CD track number for the file. This information is displayed by many MP3 players.

Year Enter a year for the file. This information is displayed by many MP3 players.

Default Button

To restore all settings in this dialog to their default values, click Defaults.

chapter 4

DigiBase Pro

With DigiBase Pro, you can:

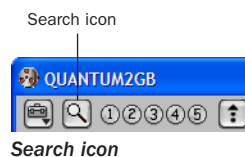
- Search on any combination of file meta-data simultaneously.
- Create and share custom Catalog browsers (Catalogs) that reference files wherever they are stored.
- View, search, and import files from Catalogs even if they are on offline volumes.

Searching for Multiple Criteria Simultaneously in DigiBase Browsers

Use DigiBase to find files by name, modification date, and kind. With DigiBase Pro, you can search multiple criteria simultaneously, and search on any criteria.

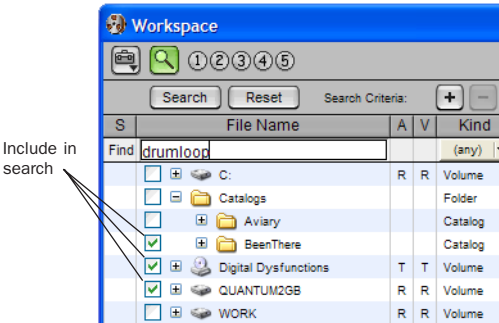
To start a search:

- 1 Open any browser.
- 2 Click the Search icon to display the Search pane.



You can also start a search by pressing Control+F (Windows) or Command+F (Mac).

3 If in the Workspace browser, select volumes or folders to search.



Selecting volumes and folders to search


4 Enter text into the File Name field to search by name, or enter a date, or select a kind from the Kind pop-up menu.

5 Choose additional search criteria as needed. Press Tab to move to the next available search field, or Shift+Tab to move to the previous.

6 Click the Search button, or press Enter (Windows) or Return (Mac).

Searching begins, indicated by the spinning arrows in the toolbar, and by the Search button changing to Stop. The Results List (at the bottom of the browser) fills with items that match the search criteria. Items can be selected and auditioned as they are found.

7 Click the Stop button at any time to stop the search, and keep the list of files already found (if any).

 For detailed information on DigiBase search functions, see the Pro Tools Reference Guide.

Catalogs in DigiBase Pro

While Volume browsers are designed to be an accurate representation of the file structure on a given volume, Catalogs are similar to having a Favorites folder, and serve as a way to collect and organize frequently used items regardless of where they are stored.

A Catalog is analogous to a folder full of aliases or shortcuts. Placing a file in a Catalog does not create a copy of the file, and does not change where the file is stored. Rather, it stores a reference (or alias) to the file so that it can be found and manipulated without having to search for its physical location.

Opening a Catalog Browser

Catalogs are displayed in the Workspace browser.



Catalogs item in the Workspace

To open a Catalog browser:

- 1 Open the Workspace browser.
- 2 Click the Catalogs Expand/Collapse icon.
- 3 Click the Expand/Collapse icon for the desired Catalog to view its contents in the Workspace.
– or –

Double-click the Catalog name to open it in its own browser window.

Clip Names in Catalogs

Clip Names are the names that appear in the timeline and Region List when a file is imported into a session.

For most files, the Clip name is the same as the file name. For OMF Files, the Clip Name is the name that appears in the Avid bin.

Clip names can only be edited in a catalog. Editing the Clip name does not affect the actual file; however, if you add the same file to a new Catalog, it will retain its original Clip Name. When you drag a file from a Catalog into a session, the edited Clip Name is what appears in the timeline and Region List.

If the Clip Name is longer than 32 characters, Pro Tools truncates the name automatically when imported into the session.

Comments and Catalogs

Catalogs provide commands for managing OS 9 Finder comments, Database comments, and Clip Names.

Database Comments in a Catalog are stored in the Catalog database. Database Comments, which can be up to 256 characters in length, are searchable, cross-platform, and editable.

Copy OS 9 Finder Comment to Database Comments Copies an item's OS 9 Finder comments to its Database comments.



OS 9 Finder comments (from the OS 9 Get Info window) are not supported in OS X Get Info windows. Use the Copy OS 9 Finder Comment to Database Comments command to utilize any OS 9 Finder comments stored with your media.

Copy Database Comments to Clip Names Copies an item's Database comments to Clip Name.

Copy File Comments to Clip Names Copies an item's File Comments to Clip Name.

Creating Catalogs

Catalogs can be added to the Workspace as new, empty Catalogs, or you can select items first and then save a Catalog of all selected items.

To create a new, empty Catalog:

- 1 Open the Workspace browser.
- 2 Choose New Catalog from the browser menu.
- 3 Enter a unique name and click OK.

To catalog a selection of items:

- 1 Open any browser (including an existing Catalog).
- 2 Select the items you want to include in the new Catalog.
- 3 From the Browser menu, choose Create Catalog from Selection.

A new, fully indexed Catalog database of the selected items is created.

To save the results of a search as a Catalog:

- 1 Choose Edit > Select All, or press Control+A (Windows) or Command+A (Mac), to select all items in the Items List.
- 2 From the Browser menu, choose Create Catalog from Selection.

Creating Catalogs of Folders

To create a Catalog of an entire folder and all its contents:

- 1 Open the Workspace browser, if not already open.
- 2 Drag and drop a single folder onto the Catalog icon in the Workspace browser.

Pro Tools first indexes the folder, then a fully indexed Catalog is created, with the same name as the dropped folder.

Renaming a Catalog

Catalogs can be renamed at any time.

To rename a Catalog:

- 1 Click the Catalog item in the Workspace browser until its name highlights.
- 2 Enter a new name for the Catalog.

Modifying, Updating, and Relinking Catalogs

Modifying Catalogs

To add items to a Catalog:

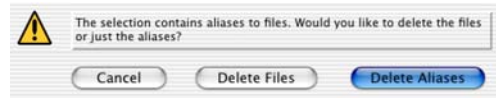
- Open the Catalog and drop new items from another browser.
 - or –
- Click the main Catalogs icon in the Workspace, to expand your view of all existing Catalogs, then drop items onto any Catalog.

To add a folder to a Catalog:

- 1 Open the Catalog.
- 2 Choose Create Folder from the Browser menu.

To delete items from a Catalog:

- 1 Select the items.
- 2 Press the Delete key, or choose Delete Selected from the Browser menu. A warning dialog appears.



Delete Catalog warning dialog

- 3 In the warning dialog, click one of the following:
 - Click Cancel to cancel the delete operation.
 - Click Delete Files to delete aliases and associated files from disk.
 - Click Delete Aliases to delete only the aliases and not the associated files.

This operation cannot be undone.

Consolidating Files with Catalogs

Catalogs are excellent tools for consolidating files from a variety of sources.

For example, create a Catalog named "Thumps" and fill it with sound effects from three different volumes. You can then drag the Catalog from the Workspace browser to another volume, and a folder named "Thumps" will be created on that volume. All of the files referenced by the Catalog will be automatically copied to the volume. Folders and sub-folders, if any, and their contents are included in the copy.

Updating Catalogs

Since a Catalog database is not linked to any particular volume, there is a limit to the abilities of the Update Index command. When Update Database for Selected is selected from the Browser menu in a Catalog, Pro Tools searches for the items represented by the aliases in the Catalog and updates the following information:

Metadata Metadata for all files found online, including File comments, are updated.

Database Comments Database Comments are not updated, because they are unique to each Catalog and are not part of the file's metadata.

Relinking Catalog Items

DigiBase Pro Catalogs are collections of “aliases” or “shortcuts” to actual files. If the files are moved, an item in a Catalog can become unlinked from the file it references.

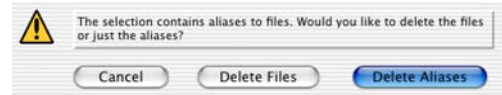
To relink a Catalog:

- 1 Open the Catalog.
- 2 Select items to relink.
- 3 Choose Relink Selected from the Browser menu in that Catalog window.

Deleting Catalogs

To delete a Catalog:

- 1 Select one or more Catalogs in the Workspace browser.
- 2 Press the Delete key, or choose Delete Selected from the Browser menu. A warning dialog appears.



Delete Catalog warning dialog

- 3 In the warning dialog, click one of the following:
 - Click Cancel to cancel the delete operation.
 - Click Delete Files to delete aliases and associated files from disk.
 - Click Delete Aliases to delete only the aliases and not the associated files.

This operation cannot be undone.

Importing Catalog Items

You can import online and offline items from Catalogs into the current session.

Importing Online Items from a Catalog

Dragging and dropping audio files to the Pro Tools Region List and Timeline is identical to dragging and dropping from Volume browsers. For more info, see the *Pro Tools Reference Guide*.

Importing Offline Items from a Catalog

With Catalogs, it is possible to search and import files that are offline. For example, if you have a music cue that you know you want to use, but it resides on a CD/DVD-ROM or other unmounted volume, you can spot the file from a Catalog to the session timeline, and it will be automatically imported into the session when the volume is mounted.

The first step is to add files to a Catalog (files must be online to be added to a Catalog). Once added to a Catalog, if the items are taken offline they will be listed in italicized text.

Offline files can be dropped from a Catalog to the timeline just like online files. When you drop the files, a dialog appears asking if you want to relink the files or skip relinking. Click Skip All to load all the items as offline files (in the timeline, their regions appear in light blue). In the Project browser, these items will be listed in the Render Sources folder, to ensure that Pro Tools remembers that these items need to be relinked.

Whenever the volume containing the offline items is mounted, Pro Tools automatically starts to import the files, in the background. This is true even if you have saved the session, quit, and relaunched Pro Tools.

Once the items are completely imported, they appear as online items in the timeline, Region List, and in the Project browser.


If the offline items match the session sample rate, bit depth, and file format, no conversion will be necessary. As long as the volume is playable, the items will become playable in the session as soon as the volume is mounted.

If the volume is unsuitable for playback, you will be informed that some items must be copied to suitable volumes first.

chapter 5

Editing Features

DV Toolkit 2 enables additional editing features for working with audio, video, film, or digital video in Pro Tools LE.

 For information on editing audio in Pro Tools, see the Pro Tools Reference Guide.

Support for Editing Multiple Video Regions

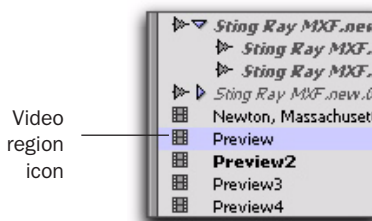
With DV Toolkit 2, Pro Tools LE lets you add and edit multiple video regions, which function in much the same way as audio regions. All edits to video regions are nondestructive.




Video region as displayed in Frames view in the Timeline

Video Regions in the Region List

A video region displays in the Region List with a small video icon next to its name.



Video region as displayed in the Region List

 See the Pro Tools Reference Guide for detailed information on working with regions in the Region List.

Showing or Hiding Video Regions in the Region List


The Region List pop-up menu provides commands that let you show or hide video regions in the Region List.

To show or hide video regions in the Region List:

- 1 In the Edit window, click the Region List pop-up menu, and choose Show.
- 2 Select the Video option to show or hide video regions.

General Video Editing

With DV Toolkit 2, most editing operations that are available for audio regions can be applied to video regions. This section describes all available video editing operations. Unless noted, the procedure for each video editing operation is the same as its audio editing counterpart.

 See the *Pro Tools Reference Guide* for detailed information on performing editing operations.

Basic Video Editing Features

- Nondestructive editing
- Multiple video playlists
- Multiple Undo
- Video regions and video region groups in Region List
- All Edit modes
- All Edit Tools (except for Time Compression Expansion and Pencil tools)

Playing and Selecting Video Track Material

- Selecting within video frame boundaries (see “Selecting within Video Frame Boundaries” on page 27)
- Selecting and editing across multiple Video and audio tracks (see “Selecting and Editing Across Multiple Audio and Video Tracks” on page 27)
- Link or unlink track and edit selections
- Auto-scroll video tracks
- Loop playback

Working with Regions and Selections

- Capture regions
- Separate regions and Separate Grabber Tool
- Region overlap and underlap
- All trimming commands except for TCE
- Heal separated regions
- Place, align, slide, shuffle, and spot regions
- Sync points
- Nudging
- Shift command
- Quantize region to Grid (rounds to nearest video frame)
- Replace region command
- Cut, Copy, Paste, and Clear commands
- Special Cut, Copy, Paste, and Clear commands
 - Repeat to fill selection
 - Editing across multiple tracks
- Duplicate command
- Repeat command
- Region groups (see “Video Region Groups” on page 28)
- Region looping

Managing Regions

- Insert “silence” (see “Using the Insert Silence Command to Insert Space in Video” on page 27)
- Compact Selected (nothing happens to the video, and at least one audio track must be selected)
- All naming and displaying of region commands

Editing Caveats

The following caveats apply to video editing in Pro Tools:

- MPEG-2 video in the Timeline cannot be edited.
- If you create and enable a track group containing audio and video tracks—and any audio track has region boundaries that do not line up with video frame boundaries—you cannot tab through any of those region boundaries.

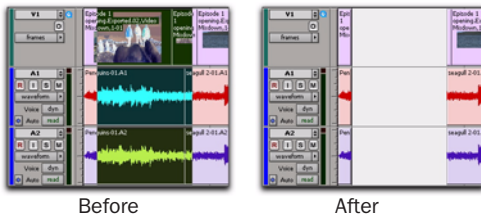
General Editing Operations Not Applicable to Video Regions

The following editing operations are applicable to audio regions, but are not applicable video regions:

- Fades
- Mute/unmute regions
- AudioSuite plug-ins
- Waveform Repair with the Pencil tool
- Strip silence
- Consolidate regions

Selecting and Editing Across Multiple Audio and Video Tracks

You can create a selection across multiple audio and video tracks, group video regions, and cut, copy, or paste audio and video simultaneously.



Selecting and editing across multiple tracks (Slip mode shown)

The current Edit mode applies to audio and video media that is cut, copied, or pasted.

Selecting within Video Frame Boundaries

Pro Tools does not let you select, play back, or edit a partial video frame. The following rules apply when selecting or editing video:

- When you make a selection in a video track, the selection boundaries follow the current Grid setting but round to the nearest video frame boundary, as follows:
 - If the selection includes more than half of a video frame, the video frame is included within the selection.
 - If the selection includes less than half of a video frame, it is not included in a video selection.
- When you paste a selection containing video to a video track, the insertion point automatically aligns with the closest video frame boundary.

A When you paste audio and video simultaneously, this video frame re-alignment may result in the audio not being positioned exactly where you placed it. A warning dialog displays when this occurs.

Using the Insert Silence Command to Insert Space in Video

Use the Insert Silence command to insert space into a video track. When played back on a video monitor, this space appears black.

This command allows you to make a selection on a track (or tracks) and insert precisely that amount of space. You can also select across video and audio tracks, and use the Insert Silence command to insert audio silence and space simultaneously.

In Shuffle mode, all video data on the track is shuffled later in the track by an amount equal to the selection. In Slip, Grid, or Spot mode, the Insert Silence command works just like the Edit > Clear command.


To insert space into a video track:

- 1 Make a selection in a track or tracks. The length of the selection determines the duration of the space inserted.
- 2 Choose Edit > Insert Silence.

Video Region Groups

You can include video regions within region groups for the following operations:

- Creating region groups
- Creating multitrack region groups (including audio tracks)
- Editing region groups
- Creating fades and crossfades for audio files in region groups
- Importing and exporting region group files

 See the *Pro Tools Reference Guide* for detailed information on working with region groups.

The Universe Window

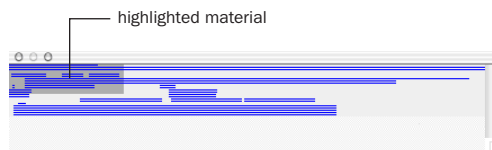
The Universe window displays an overview of the entire session, representing audio and MIDI material on all tracks that are not hidden (including tracks that are inactive, or that contain offline regions). The order in which material is displayed in the Universe window corresponds to the track order in the Edit window.

To open the Universe window:

- Choose Window > Universe.



You can also open the Universe window by pressing Control (Windows) or Command (Mac) followed by 7 on the numeric keypad.



Universe window

Audio material residing in audio tracks is represented by a single, horizontal line in the Universe window. Each channel in a stereo track is represented individually.

Since Auxiliary Input and Master Fader tracks do not contain audio, they are displayed as blank areas in the Universe window.

MIDI tracks containing note material are represented by single, horizontal lines.

Resizing the Universe Window

Even though the Universe window can be resized horizontally and vertically, the length of the entire session is always displayed in the Universe window. If the Universe window is resized so some of the session's track are not displayed, a vertical scroll bar becomes available.

Highlighted Material in the Universe Window

The highlighted, shaded area in the Universe window represents the material displayed in the Edit window. If you change what's displayed in the Edit window—by zooming, scrolling horizontally or vertically, hiding or unhiding tracks, or changing track heights—the highlighted area in the Universe window updates.

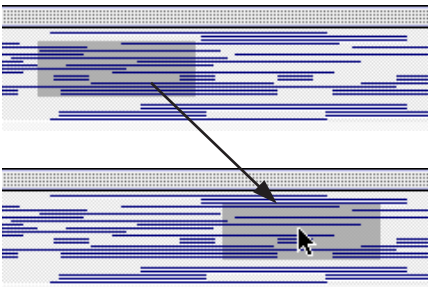
During playback, if the Edit window is set to scroll, the highlighted area in the Universe window also scrolls.

Scrolling in the Universe Window

By clicking in the Universe window, you can automatically scroll, either horizontally or vertically, the material displayed in the Edit window. This provides a convenient method of locating anywhere in the session, or adjusting which shown tracks are visible in the Edit window.

To move the highlighted area in the Universe window:

- 1 Choose Window > Universe.
- 2 Drag the highlighted area to a different position in the Universe window to affect which tracks are displayed in the Edit window.



When all tracks are visible in the Edit window and the session is zoomed all the way out, with all regions visible, the entire Universe window is shaded.

Continuous Scrolling During Playback

The Continuous Scroll mode option causes the Edit window's contents to scroll continuously past the playback cursor, which remains in the center of the window. With this option, playback is always based on the Timeline selection.

To enable Continuous Scroll mode:

- Choose Options > Scrolling and select Continuous Scroll.



Making a selection in the Timeline or a playlist, or manually scrolling the Timeline while in Continuous Scroll (or Page Scroll) mode will suspend page scrolling. To resume page scrolling and jump to the current playback location, click the Playback Cursor locator in the Main Timebase ruler.

Half-Screen Edit Window

When the Scrolling option is set to Continuous, a half-screen appears at the far left of the Edit window (before the beginning of the session).




half-screen

Half-screen Edit window

The Scrub Trim Tool

The Scrub Trim tool is a convenient tool for auditioning material (on up to two tracks) to find a trim point and trim regions in one step. You can drag in a track to hear the audio information, then trim at a specific location by releasing the mouse button.

Scrub playback speed and direction vary with controller movement. Scrubbed audio is routed through the track signal path, so you hear any effects in the signal path.

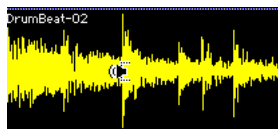
 For information on trimming a looped region with the Scrub Trim tool, see the *Pro Tools Reference Guide*.

To scrub trim a track:

- 1 Select the Scrub Trim tool from the Trim Tool pop-up menu. The tool changes to a speaker with a bracket.
- 2 Drag within a track to the left or right.

This action creates a new region. Note that the Scrub Trim tool changes into a “right trim” or “left trim” shape as it is placed over the right or left side of a region.

To reverse the direction of the Scrub Trim tool, press Alt (Windows) or Option (Mac) before you click the region.



Scrub Trim tool over a region

Audio from a scrubbed track is routed through the track signal path. When you locate the trim point, release the mouse button to trim the region.

To scrub trim two tracks, click with the Scrub Trim tool between two adjacent tracks and drag.

To scrub with finer resolution (without having to zoom in), press Control (Windows) or Command (Mac) while scrubbing.

Replacing Audio Regions

You can use the Replace Region function to replace multiple instances of an audio region in a playlist with another region.



Replace Region dialog

This is useful in post production if you use a sound effect, room tone, or atmosphere region many times in a session, and later decide to replace one or all of the original regions with a different region.

This is also useful in music production if you want to replace a certain loop or sample (for example, a drum beat) with a new one.

Using the Replace Region Command

The Replace Region function only works on a selection that includes a single region on one track. The function is not available when the playlist selection includes the start points for two or more regions. Also, if the selection is across several tracks, only the selection in the first (top) track is used.

To replace regions:

1 Select a region in a track's playlist that you want to replace. The selection can extend beyond the region's end point, to include material from the replacement region that is longer than the original region.

2 Control-Shift-drag (Windows) or Command-Shift-drag (Mac) the replacement region from the Region List to the selected region. The Replace Region dialog opens.

3 If you want to replace only the original region, select Replace Original Region.

– or –

If you want to replace multiple regions, select Replace All Instances of the Original or Replace All Regions That Match Original.

4 If you selected Replace All Regions That Match Original, set the Match criteria (Start Position, End Position, and Name).

5 If you are replacing multiple regions, select whether to apply the replacement on the current track, all tracks, or within the selection.

6 Select whether to fit the replacement regions to the current selection, the entire region, or the entire replacement region regardless of the destination length.

7 When you have set all the options, click OK.

Replace Regions with Drag and Drop

To open the Replace Region dialog without having to first make a selection, use the key modifiers Control+Shift (Windows) or Command+Shift (Mac) while dragging any region from the Region List to any unselected region on a track.

Selecting Regions

The Replace Regions command is also available in the Region List pop-up menu. To use this command, make sure there is a region selected in a track and a different (replacement) region selected in the Region List, as explained in the following instructions.



By default, selecting a region in a track selects the same region in the Region List. If this preference is turned off on your system, the following instructions are not necessary.

To access the Replace Regions dialog:

1 Select a region in a track. This is the region that will be replaced.

2 Control-click (Windows) or Command-click (Mac) the desired replacement region in the Region List to select it. (The Control key is required if the preference setting Region List Selection Follows Track Selection is at its default, enabled setting).

3 Choose Replace Regions from the Region List pop-up menu.

Replace Region and Stereo Tracks

The Replace Region command supports dragging stereo regions from the Region List to stereo tracks.

For example, you can replace a stereo region, selected in a stereo audio track, with another stereo region from the Region List. But you cannot replace it with two mono audio regions.

In addition, replacing regions in multiple mono tracks with stereo regions is not supported.

Replace Region Dialog Options

The following options are available in the Replace Region dialog:

Replace: Original Region Only Replaces only the selected region with the replacement region dragged from the Region List.

Replace: All Instances of the Original Region Replaces all instances of the selected region that fit the On criteria with the replacement region from the Region List.

- On This Track: replaces regions that fit the Match criteria and are on the same track as the original region.
- On All Tracks: replaces regions that fit the Match criteria for all tracks in the session.
- On Within the Selection: replaces regions that fit the Match criteria within the current selection.

Replace: All Regions That Match Original Region's Replaces all regions that fit the Match criteria and the On criteria with the replacement region from the Region List.

- Start Position: replaces all regions that have the same original *start* time as the selected region. This includes regions that may have been auto-created when trimming end points.
- End Position: replaces all regions that have the same original *end* time as the selected region. This includes regions that may have been auto-created when trimming start points.
- Name: replaces all regions that come from the same audio file and have been renamed to the same name
- On This Track: replaces regions that fit the Match criteria and are on the same track as the original region.
- On All Tracks: replaces regions that fit the Match criteria for all tracks in the session.
- On Within the Selection: replaces regions that fit the Match criteria within the current selection.

Region matching uses all specified Match criteria. For example, if you select Start Position and End Position, all regions from the same original audio file as your selection with the same original start and end times will be replaced.

Fit Region Using The: Original Region Length If the replacement region is smaller than the original region, the region is placed in the playlist and any remaining audio from the original region is removed.

If the replacement region is larger than the selection, it is placed in the playlist and trimmed to fit within the length of the original region.

Fit Region Using The: Original Selection

Length When the playlist selection extends beyond the original region, the replacement region (if larger than the original region) is trimmed to fit within the selection.

Fit Region Using The: Replacement Region

Length The replacement region is placed in its entirety, regardless of the length of the original region or selection.

TCE (Time Compression and Expansion) Edit To Timeline Selection

When the Edit and Timeline selections are unlinked, you can compress or expand an audio selection to fit the Timeline selection. This feature works by using the Time Compression/Expansion plug-in to expand or compress the selected audio material.

To fit an Edit selection to the Timeline:

- 1** Deselect Options > Link Timeline and Edit Selections.
- 2** With the Selector tool, select the audio material to be compressed or expanded.
- 3** In any Timebase ruler, select the time range where you want to fit the audio material.
- 4** Choose Edit > TCE Edit to Timeline Selection. The Edit selection is compressed or expanded to the length of the Timeline selection.

TCE Edit to Timeline Selection on Multiple Tracks

The TCE Edit to Timeline command can be used on selections across multiple tracks.

However, all regions are compressed or expanded equally by the same percentage value, based on Edit selection range. This ensures that the rhythmic relationship between the different tracks is retained.

Fitting an Audio Region to an Edit Selection

Regions can be dragged from the Region List to fit within an Edit selection. The dragged region is compressed or expanded to fit within the selection. This feature uses the Time Compression/Expansion plug-in to expand or compress the audio region.

To fit an audio region to an Edit selection:

- 1** With the Selector tool, select a time range in an audio track.
- 2** Control-Alt-drag (Windows) or Command-Option-drag (Mac) the region from the Region List to the track with the selection. The start of the region is positioned at the selection start, and the region is compressed or expanded to match the length of the selection.

Fit to Selection on Multiple Tracks

The Fit to Selection command supports dragging multiple regions from the Region List to multiple tracks.

However, all dragged regions are compressed or expanded equally by the same percentage value, based on length of the region last clicked before dragging.

Selecting an Alternate Channel for a Specific Region

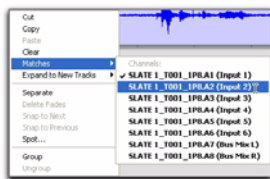
You can replace a mono region (or selected portion of a mono region) with a matching segment of an alternate channel that was recorded simultaneously. Any fades performed on the original region are automatically recalculated against the replacement region, and any pre-existing automation on that track is unchanged.

To replace a region with a matching alternate channel:

- 1 In the Timeline, make a selection that includes or overlaps the region or portion of the region you want to replace.
- 2 Do one of the following:
 - With any Edit tool, Right-click (Windows or Mac) or Control-click (Mac) the selection you want to replace, then select Matches from the pop-up menu.
 - or –
 - With the Selector tool, Control-click (Windows) or Command-click (Mac) the selection you want to replace.

The Matches submenu displays matching alternate channels under the Channels header. (This submenu also displays any available alternate takes under the Alternates header.)

- 3 From the Matches submenu, select the name of the alternate region that you want to use to replace the original region.



Selecting an alternate matching channel to replace a region

- 4 Repeat this procedure for every region you want to replace on each track.


Conditions for Alternate Channel Availability

An alternate channel is available to replace the original channel (represented by the region or portion of a region selected on the Timeline) if all of the following are true:

- Both channels are part of a multichannel part of a recording made simultaneously on one or more field recorders.
- Certain metadata matches between the original channel and the alternate channel.
- The metadata embedded during shooting and recording has been preserved prior to import into Pro Tools.


With multichannel recordings from one or more field recorders, both channels must overlap at least once between their start time code and end time code positions, and must also meet one of the following conditions:

- Matching Scene and Take
- Matching Shoot Date (applies only if Scene and Take contain any information for both channels)
- Matching Tape name
- Matching Sound Roll name
- Alternate channel Sound Roll name matches current channel Tape name
- Alternate channel Tape name matches current channel Sound Roll name

 For detailed information on working with multichannel recordings made with field recorders, see the *Field Recorder Workflow Guide*.

Expanding Alternate Channels to New Tracks

When working with a mono region that is part of a multichannel recording, you can expand that region (or a selected portion of it) to new tracks that reflect its matching alternate channels while preserving any edits or fades.

 *Matching alternate channels are mono channels that were recorded simultaneously with the original region (such as multichannel recordings made by one or more field recorders). For detailed criteria that alternate matching channels must meet, see “Conditions for Alternate Channel Availability” on page 34.*

For example, this feature lets you easily create different versions of an edited dialogue track corresponding to multiple channel inputs (microphones) that were recorded simultaneously.

To expand alternate channels to new tracks:

1 In the Timeline, do one of the following:

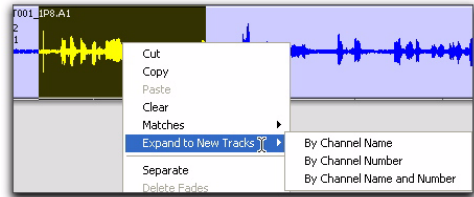
- To expand only a portion of the regions on the track, make a selection that includes or overlaps any number of regions on a track, and Right-click (Windows or Mac) or Control-click (Mac) the selection.

– or –


- To expand all of the regions on the track, Right-click (Windows or Mac) or Control-click (Mac) the track name.

2 Choose the Expand to New Tracks submenu, and select one of the following methods by which to expand alternate channels for the selection to new tracks:

- By Channel Name
- By Channel Number
- By Channel Name and Number



Expanding a selection to new tracks

 See “Determining the Method of Expanding Alternate Channels to New Tracks” on page 36 for detailed information on how each of these options expand to new tracks.

If alternate channels are available, Pro Tools expands them (plus the channel represented in the original track) to new tracks according to the chosen parameters.



Result of expanding a selection to new tracks

Determining the Method of Expanding Alternate Channels to New Tracks

Alternate channels may be expanded to new tracks by channel name, channel number, or channel name and number, as follows:

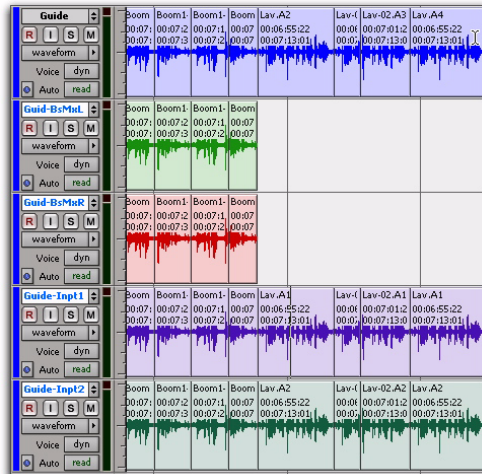
Alternate Channel Expansion by Channel Name

Choosing Expand to New Tracks > By Channel Name creates a new track for each unique channel name (such as *Boom*) found in alternate channels of the selection.

If duplicate channel names are encountered, additional tracks are created for each duplicate channel name, as follows:

- If the duplicate channel has a different Sound Roll or Tape name from another channel with the same channel name, an additional track is created for that duplicate channel and its Sound Roll or Tape name is appended to the track name. (See “How Tracks Are Named When Expanding Alternate Channels by Channel Name” on page 37.)
- If the duplicate channel has the same Sound Roll or Tape name as another channel with the same channel name, only the topmost duplicate channel in that list of alternate matching channels will be expanded to a new track.

Each new track contains only channels sharing a particular channel name, with edits and fades preserved from the original selection. Gaps reflect regions from the original selection that did not have an alternate matching channel with that channel name.



Expanded channels with gaps representing regions that did not have an alternate matching channel with the channel name

How Tracks Are Named When Expanding Alternate Channels by Channel Name

Tracks expanded this way are named as follows:

- For unique channel names that create only one track, each track is named using the original track's name plus the channel name. For example, expanding the unique channel name *Boom* from the track *Guide.A1* would create a new track called *Guide.A1.Boom*.
- For unique channel names that create two or more tracks, each of the new tracks that share channel names are named by appending *SR* (for Sound Roll) plus the number of the sound roll or tape to the new track name. For example, expanding the duplicate channel names *Boom* from the track *Guide.A1* would create *Guide.A1.Boom.SR:100* and *Guide.A1.Boom.SR:101*, where *100* and *101* represent the Sound Roll or Tape name.

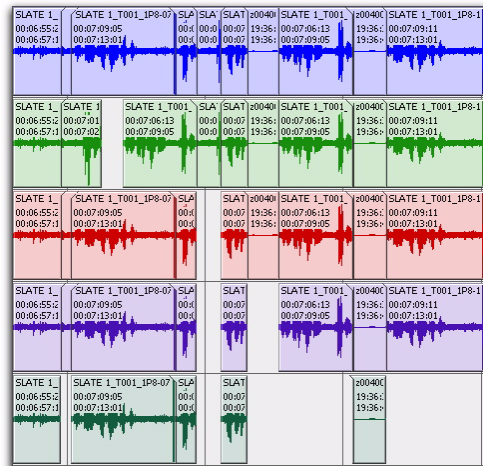
Alternate Channel Expansion by Channel Number

Choosing Expand to New Tracks > By Channel Number creates a new track for each unique channel number (such as *A1*) found in the list of combined matching alternate channels for all regions in the selection.

If duplicate channel names are encountered, additional tracks are created for each duplicate channel name, as follows:

- If the duplicate channel has a different Sound Roll or Tape name from another channel with the same channel number, an additional track is created for that duplicate channel and its Sound Roll or Tape name is appended to the track name.
- If the duplicate channel has the same Sound Roll or Tape name as another channel with the same channel number, only the topmost duplicate channel in that list of alternate matching channels will be expanded to a new track.

Each new track contains only channels sharing a particular channel number, with edits and fades preserved from the original selection. Gaps reflect regions from the original selection that did not have an alternate matching channel with that channel number.



Expanded channels with gaps representing regions that did not have an alternate matching channel with the channel number

How Tracks Are Named When Expanding Alternate Channels by Channel Number

Tracks expanded this way are named as follows:

- For unique channel numbers that create only one track, each track is named using the original track's name plus the channel number. For example, expanding the unique channel number *A1* from the track *Guide.A1* would create a new track called *Guide.A1.A1*.
- For unique channel number that create two or more tracks, each of the new tracks that share channel numbers are named by appending *SR* (for Sound Roll) plus the number of the sound roll or tape to the new track name. For example, expanding the duplicate channel numbers *A1* from the track *Guide.A1* would create *Guide.A1.A1.SR:100* and *Guide.A1.A1.SR:101*, where *100* and *101* represent the Sound Roll or Tape name.

Alternate Channel Expansion by Channel Name and Number

Choosing Expand to New Tracks > By Name and Number creates a new track for each unique channel name and number (such as *Boom.A1*) found in the list of combined matching alternate channels for all regions in the selection.

If duplicate channel names are encountered, additional tracks are created for each duplicate channel name, as follows:

- If the duplicate channel has a different Sound Roll or Tape name as another channel with the same channel name and number, an additional track is created for that duplicate channel and its Sound Roll or Tape name is appended to the track name.

- If the duplicate channel has the same Sound Roll or Tape name from another channel with the same channel name and number, only the topmost duplicate channel in that list of alternate matching channels will be expanded to a new track.

Each new track contains only channels sharing a particular channel name and number, with edits and fades preserved from the original selection. Gaps reflect regions from the original selection that did not have an alternate matching channel with the channel name and number.

How Tracks Are Named When Expanding Alternate Channels by Channel Name & Number


Tracks expanded this way are named as follows:

- For unique channel name and number combinations that create only one track, each track is named using the original track's name plus the channel name and number. For example, expanding the unique channel name and number combination *Boom.A1* from the track *Guide.A1* would create a new track called *Guide.A1.Boom.A1*.
- For unique channel name and number combinations that create two or more tracks, each of the new tracks that share channel name and numbers are named by appending *SR* (for Sound Roll) plus the number of the sound roll or tape to the new track name. For example, expanding the duplicate channel name and numbers *Boom.A1* from the track *Guide.A1* would create *Guide.A1.A1.SR:100* and *Guide.A1.A1.SR:101*, where *100* and *101* represent the Sound Roll or Tape name.

chapter 6

Mixing and Automation Features

DV Toolkit 2 enables additional mixing and automation features for working with audio, film, video, or digital video in Pro Tools LE.


 *For more information on mixing and working with automation in Pro Tools, see the Pro Tools Reference Guide.*

Creating Snapshot Automation

Pro Tools lets you write automation data values for multiple parameters in a single step (or snapshot). You can write snapshot automation in two ways:


To a Selection Automation data is written to the Edit selection (or using the Timeline selection if Link Timeline and Edit selection is enabled). Anchor breakpoints are placed just before and after the selection so that data outside the selection is not affected.

To a Cursor Location Automation data is written at the insertion point. After the insertion point, the automation ramps to the next breakpoint value, or if no breakpoints exist, remains at the newly written value for the remainder of the session.

 *For more information on cutting, copying, and pasting automation data within a session, see “Writing Snapshot Automation over Existing Automation Data” on page 40.*

To write snapshot automation:

- 1 In the Automation Enable window, make sure that the parameters you want to edit are write-enabled. Deselect any parameters whose automation you want to preserve.
- 2 In the Edit window, click the Track View selector to show the automation you want to edit.

 *If you are writing automation to all enabled parameters, select one of the automation types to view. You can only view one automation parameter at a time in the Track View, even when writing automation to all enabled parameters.*

3 Write a breakpoint in the playlist if none currently exists, as follows:

- Place the cursor in the playlist (or make an Edit selection), then choose Control+Forward Slash (/) (Windows) or Command+Forward Slash (/) (Mac).
- or –
- Select the Grabber tool and click anywhere in the playlist.

⚠ *If you are adding snapshot automation on an automation playlist with no previously written data, and you do not first create a breakpoint, new values will be written to the entire playlist.*

4 Select an area in the track's playlist (or within multiple tracks) where you want to apply the automation.

– or –

Place the cursor at an Edit insertion point.

5 Adjust the controls you want to automate. You can also change a plug-in preset.

6 Choose Edit > Automation and do one of the following:

- To write the current value to only the currently displayed automation parameter, choose Write to Current.
- or –
- To write the current settings for all automation parameters enabled in the Automation Enable window, choose Write to All Enabled.

Writing Snapshot Automation over Existing Automation Data

When you move the playback cursor, the automated controls in Pro Tools update to reflect the automation data that is already on the track. To keep the settings you have made for a snapshot, you can suspend automation parameters to prevent them from updating.

To write snapshot automation over existing data:

1 In the Automation Enable window, make sure that the automation parameters you want to edit are write-enabled. Deselect any parameters whose automation you want to preserve.

2 Adjust the controls for the parameters you want to automate.

3 Click the Automation Mode selector and select Off mode for the tracks you want to apply the automation.

4 With the selector, select the track range you want to apply the automation.

5 Choose Edit > Automation and select one of the following from the submenu:

- To write the current value to only the automation parameter currently displayed in the Edit window, choose Write to Current.
- or –
- To write the current settings for all automation parameters enabled in the Automation Enable window, choose to Write to All Enabled.

Capturing Automation and Applying it Elsewhere

The Write Automation commands can also be used to capture automation states at specific locations in a track and apply them to other locations in the track.

To capture and apply automation:

- 1 In the Automation Enable window, make sure that the automation parameters you want to edit are write-enabled. Deselect any parameters whose automation you want to preserve.
- 2 Click the Automation Mode selector and select Read mode for the tracks that have automation you want to capture.
- 3 Make sure to select Options > Link Timeline and Edit Selection.
- 4 With the Selector tool, select the location where you want to capture automation. All automated controls update to reflect the automation at that location. (If you make a selection, the controls update to reflect the automation at the beginning of the selection.)
- 5 In each track you want to apply the captured automation, click the track's Automation Mode selector and set the Automation mode to Off.
- 6 With the Selector tool, select the location where you want to apply the automation.
- 7 Enable the automation parameters previously suspended.

8 Choose Edit > Automation and select one of the following from the submenu:

- To write the current value to only the automation parameter currently displayed in the Edit window, choose Write To Current Parameter.
- or –
- To write the current settings for all automation parameters enabled in the Automation Enable window, choose Write To All Enabled Parameters.

9 Click the Automation Mode selector and select Read mode for the tracks you want to play back with automation.

Snapshot Automation and Trimming of Automation Data

Pro Tools lets you use trim values as snapshots and apply the *relative* changes (delta values) to the selected automation by using the Trim Automation command. This works in much the same way as the Write Automation command, except that it writes delta values instead of absolute values to automation data.

For example, you can do an alternate mix with lead vocals up or down 1 dB and retain any existing level automation. If you did a previous pass to “ride” the vocals during heavier and lighter sections of a song, automation will be updated by the relative amount of the trim value only.

You can use trim values in writing snapshot automation to any automatable parameter.

To create a snapshot of relative changes in automation data:

- 1 In the Automation Enable window, make sure that the automation parameters you want to edit are write-enabled. Deselect any parameters whose automation you want to preserve.
- 2 Select the area of the track you want to edit. All automated controls update to reflect the automation at the beginning of the selection.
- 3 Move the controls for the parameter up or down by the amount you want to change the data.
- 4 Choose Edit > Automation and do one of the following:
 - To write the current delta value to only the currently displayed automation parameter, choose Trim to Current.
 - or –
 - To write the current delta value for all automation parameters enabled in the Automation Enable window, choose Trim to All Enabled.

Glide Automation

The Glide Automation commands let you manually create an automation transition (or glide) from an existing automation value to a new one, over a defined period of time.



When gliding multiple parameters at the same time (such as with plug-ins) use the Edit > Automation > Glide to All Enabled option.

To apply Glide Automation to the current automation parameter type:

- 1 In the Automation Enable window, make sure the automation type is write-enabled.
- 2 Click the Track View selector to choose the automation type you want to automate.
- 3 Drag with the Selector tool in the track to select the area you want to write the glide to.
- 4 Change the automation parameter to the value desired at the end of the selection. For example, to glide automation volume to –Infinity, move the Volume fader to –Infinity.
- 5 Choose Edit > Automation > Glide to Current.



You can also press Alt+Forward Slash (/) (Windows) or Option+Forward Slash (/) (Mac).

To do a Glide Automation to all current enabled parameters:

- 1 In the Automation Enable window, make sure the automation types are write-enabled.
- 2 In each track you want to automate, click the Track View selector and select from the pop-up menu the automation type you want to automate.
- 3 With the Selector tool, click and drag horizontally to include all the tracks you want to automate in a selection (drag vertically to define the time range).
- 4 In each track you want to automate, change the automation parameter to the value desired at the end of the selection.
- 5 Choose Edit > Automation > Glide to All Enabled.



You can also press Alt+Shift+Forward Slash (/) (Windows) or Option+Shift+Forward Slash (/) (Mac).

Glide Automation Considerations


When Glide Automation is applied to automation data, it behaves as follows:

- When a selection is made, automation breakpoints are written at the start and end points of the Glide Automation. The automation value at the start of the selection is the start point of the Glide Automation and the end of the selection is the end point of the Glide Automation. The Glide Automation that is created between the two is based on the length of the selection and the end value that is selected.
- If automation breakpoints follow the selection, they are not changed, but the value selected for the end of the selection is written from the end point up until the next breakpoint.
- If no automation breakpoints follow the selection, the value selected for the end of the selection is written to the end of the track.
- If no selection is made, a breakpoint is written to the current location, and the value selected for the Glide Automation is written to the next breakpoint.

chapter 7

Time Code and Synchronization Features


DV Toolkit 2 enables various time code and synchronization features for working with audio, film, video, or digital video in Pro Tools LE.

 For more information on working in Pro Tools with time code and synchronization, see the Pro Tools Reference Guide.

 Time Code Mapping Options are covered in “Time Code Mapping Options” on page 13.

Timebase Rulers

DV Toolkit 2 adds three additional Timebase rulers to Pro Tools LE sessions: Time Code, Time Code 2, and Feet+Frames. In Pro Tools LE with the DV Toolkit 2 option, you can spot audio to Time Code or Feet+Frames.

 For information on other Timebase rulers, see the Pro Tools Reference Guide.

To add one of these rulers to the Timebase ruler:

- Do one of the following:
 - Select View > Rulers > Time Code.
 - Select View > Rulers > Time Code 2.
 - Select View > Rulers > Feet+Frame.

To set the Main Time Scale to Time Code or Feet+Frames, do one of the following:


- Click a Main Counter selector (located at the top of the Edit window and also in the Transport window, when it is set to display Counters) and select Time Code or Feet+Frame.

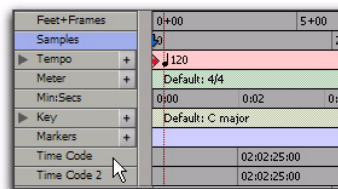


Main Counter selector (in the Edit window)

– OR –

- If Time Code or Feet+Frame are displayed in the Timebase ruler, click its name so it becomes highlighted.

 *Setting the Main Time Scale to the timebase currently displayed in the Sub Counter switches the two Time Scales, setting the Sub Time Scale to the previous timebase of the Main Time Scale.*



Switching the Main Time Scale

Pro Tools will display time code values in the currently selected SMPTE frame rate or the currently selected Feet+Frames rate.

Secondary Time Code Ruler

Pro Tools provides an additional time code ruler, labeled Time Code 2, in the Pro Tools Edit window. This secondary time code ruler lets you re-reference video frame rates in the Timeline that are different from the session time code rate.

The Time Code 2 ruler can be set to show any of the following rates:

- 23.976 FPS
- 24 FPS
- 25 FPS
- 29.97 FPS
- 29.97 FPS Drop
- 30 FPS
- 30 FPS Drop
- 50 FPS
- 59.94 FPS
- 59.94 FPS Drop
- 60 FPS
- 60 FPS Drop

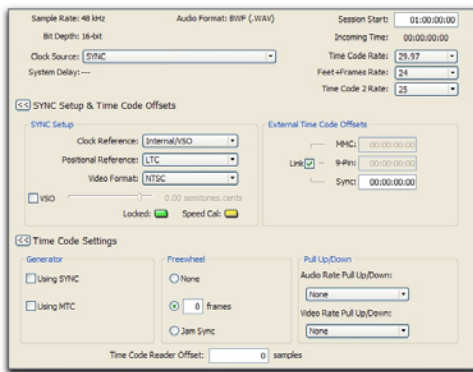
The Time Code 2 ruler cannot be set to the Main Ruler in Pro Tools.

Half-Frame Nudge/Grid

Pro Tools provides an additional grid resolution of 1/2 Frame to allow for easy alignment of material when referencing a high-definition (HD) frame rate on the secondary time code (Time Code 2) ruler.

Selecting Time Code and Time Code 2 Rates

The Time Code Rate and Time Code 2 Rate for the session can be set in the Session Setup window with the Time Code Rate and Time Code Rate 2 selectors. The Time Code ruler displays the Time Scale in SMPTE frames (hours:minutes:seconds:frames).



Session Setup window with DV Toolkit 2 Option

Pro Tools supports the following rates and formats: 23.976 fps, 24 fps, 25 fps, 29.97 fps Non-Drop, 29.97 fps Drop, 30 fps Non-Drop, and 30 fps Drop. In addition, DV Toolkit 2 supports audio pull up and pull down (see “Pull Up and Pull Down Commands” on page 48).



See the Pro Tools Reference Guide for more information on time code and synchronization.

Selecting Feet+Frame Rate

The Feet+Frame Rate for the session can be set in the Session Setup window with the Feet+Frame Rate selector. Supported rates are 23.976, 24, and 25 fps.

Set this rate to match the rate of the film projector, or the video if the film projector speed is taken into account.

Redefining Time Code Position

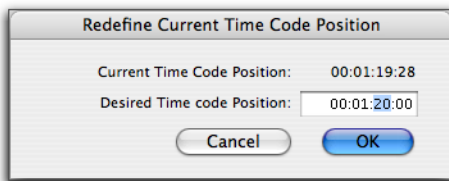
Use the Current Time Code Position command to redefine the current time code position and session start time. By creating an insertion point (or selection), and then entering the desired new time code position for that location, the session start time will be recalculated based on the new, relative Time Code location.

To set the current Time Code position:

- 1 With the Selector, click in a track (or make a selection) where you want to redefine the position.

A *If your insertion or selection is not on a frame boundary, it will round to the closest boundary.*

- 2 Choose Setup > Current Time Code Position.



Redefine Current Time Code Position dialog

- 3 Enter a new time code position in the dialog.
- 4 Click OK.

Redefining Current Feet+Frames Position

Use the Current Feet+Frames Position command to redefine the Feet+Frames position at the current insertion point (or starting point of a selection).

A *Redefining Feet+Frames does not redefine the session start time.*

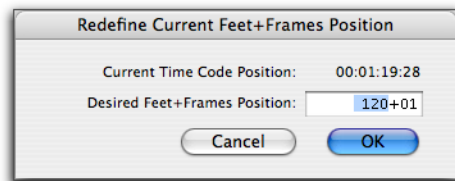
Typically, this command is used for integrating test tones, pre-roll, Academy leader, and similar pre-program material into Pro Tools sessions.

To set a relative frame position for a session (Feet+Frames):

- 1 With the Selector, click in a track (or make a selection) where you want to redefine the position.

A *If your insertion or selection is not on a frame boundary, it will round to the closest boundary.*

- 2 Choose Setup > Current Feet+Frames Position.

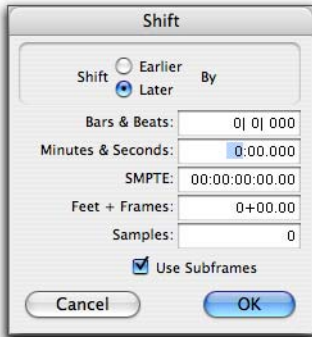


Redefine Current Feet+Frame Position dialog

- 3 Enter a Feet+Frame position in the dialog.
- 4 Click OK.

Use Subframes Option

When spotting or shifting material in Pro Tools, or using the Go To dialog, enable the Use Subframes option for greater precision.



Shift dialog with the Use Subframes option enabled

A subframe is 1/100th of a frame. The Use Subframes option enables you to use these smaller units for greater accuracy. When enabled, this command adds a decimal and two decimal places of additional time for subframes in SMPTE and Feet+Frames-based fields in the Spot, Shift, and Go To dialogs.

Pull Up and Pull Down Commands

Use Audio Rate Pull Up/Down and Video Rate Pull Up/Down for audio layback to film or video, or when recording audio for film or video. See the *Pro Tools Reference Guide* for more information.

⚠ When using Audio Rate Pull Up/Down, DV Toolkit does not automatically adjust the Pro Tools sample rate clock during playback or recording. To synchronize to your external device, or to do a real-time transfer, you must manually adjust your external (S/PDIF or Optical) clock device according to the pull factors that are being used.

⚠ When using a video I/O (such as the Avid Mojo) as the S/PDIF clock source, Audio Rate Pull Up/Pull Down is not supported.

Audio Rate Pull Up/Down Applies pull up or pull down factors to session audio record and playback. The Audio Rate Pull Up/Down pop-up menu is located in the Session Setup window.

Video Rate Pull Up/Down Lets you change the frame rate of video playback independently from the audio pull-ups (if any). The Video Pull Up/Down pop-up menu is located below the Audio Rate Pull Up/Down pop-up menu in the Session Setup window. Choices are determined by the file format of the video clip, as well as its frame rate.

Audio Pull Down Factors and QuickTime Movies

Audio “pulls” are an industry standard method of adjusting the speed of audio playback to line up with off-speed picture.

In normal industry standard workflows, when audio is pulled down, video and time code maintain their current speed, and only the audio and MIDI are pulled down, in relationship to the video and time code.

For example, when 24 frame film to 29.97 NTSC video transfers are made, it is necessary to slow the film playback speed during the transfer process by 0.1%.

In order to make the same speed change for production audio to match the speed of this new slower picture, Pro Tools audio needs to also be “pulled down” by 0.1%.

To slow audio in Pro Tools, the audio can either be sample rate converted on import or the incoming word clock sample rate source must be “pulled down” by 0.1% (resulting in a 48,000 Hz session speed to be pulled down to play in real time at 47,952 Hz). The pull down setting in Pro Tools adjusts the visual representation of regions on the timeline to equal the word clock pull up/down change.

When the clock is reset to the non-pulled down sample rate, the audio plays at the original film speed.



MIDI is always pulled in line with audio pulls.

DV Toolkit 2 for Pro Tools LE offers limited pull capabilities, primarily for Pro Tools HD users who have a secondary Pro Tools LE system that they use to perform smaller tasks or for remote work.

Although DV Toolkit 2 for Pro Tools LE offers some pull down options, it does not have the ability to adjust the internal sample clock the same way Pro Tools HD systems do in tandem with the Digidesign SYNC I/O peripheral.

Since DV Toolkit 2 for Pro Tools LE does not have any means to adjust the Pro Tools sample clock, it instead simulates the audio/video pull relationship by pulling up the video instead of pulling down the audio. This maintains the proper video/audio speed relationship when using the fixed Pro Tools internal clock. The audio sample clock is not pulled down, so the digital outputs are not outputting a pulled down sample clock.

If you are using an external clocking source (such as S/PDIF or ADAT Optical), Pro Tools audio and MIDI are resolved to the digital input's clock speed. If you select audio pull down, the audio still doesn't pull down in Pro Tools LE; the video still pulls up to maintain the proper relationship, and the actual Pro Tools sample rate is now dependent on the digital clock source. However, if the incoming digital clock speed is *pulled down*, Pro Tools audio and MIDI will run at a pulled down rate, and the video will play back at its normal speed.

When pull down is selected in DV Toolkit 2 for Pro Tools LE, the following occurs:

- If the external clock is not pulled down, the actual sample rate of Pro Tools LE audio and MIDI is not pulled down, but the video is pulled up.
- If the external clock is pulled down, the actual sample rate of Pro Tools LE audio and MIDI is pulled down, and the video plays at its original non-pulled speed.

chapter 8

Additional Software

DV Toolkit 2 includes additional software for working with your Pro Tools session material.

DINR LE

The LE version of Digidesign Intelligent Noise Reduction (DINR) is included with DV Toolkit 2 option. DINR LE provides broadband and narrowband noise reduction for suppressing such unwanted elements as tape hiss, air conditioner rumble, and microphone preamp noise.

 *Refer to the Digidesign Plug-ins Guide for details on using BNR.*


DigiTranslator

DigiTranslator is included with the DV Toolkit 2 Option. DigiTranslator lets Pro Tools exchange audio and video files, and sequences with other AAF and OMFI-compatible applications.

 *Refer to the DigiTranslator Integrated Option Guide for details on using DigiTranslator.*

TL Space Native

TL Space Native is a powerful convolution reverb for post production and music applications. The TL Space package includes a comprehensive library of high-quality sampled reverb spaces and effects, from large concert halls to dense plate reverbs.

 *Refer to the TL Labs Plug-ins Guide for information on using TL Space Native.*

VocALign Project from Synchro Arts

VocALign Project from Synchro Arts is included with the DV Toolkit 2 Option. VocALign Project automatically adjusts the timing of one audio signal to match another by applying varying amounts of time compression or expansion to audio regions. It is designed for synchronizing replacement dialogue in video and film post production, but is also useful for tightening up doubled vocal or instrumental parts in music.

 *Refer to the VocALign Project documentation for details.*

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