# I   Interface Fundamentals

Windows

The Media Composer interface is focused on three primary windows: the Composer, the Timeline and the Project. The Composer window contains the source and record monitors and is the place where you'll play and mark clips or sequences. The Timeline displays the contents of the source or record monitor and allows you to manipulate sequences, transitions and effects.

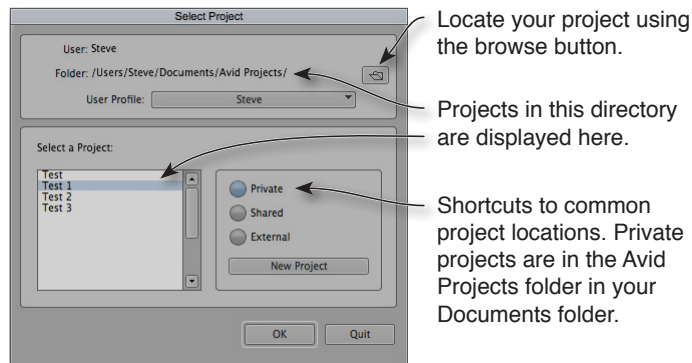The Project, Composer and Timeline Windows.
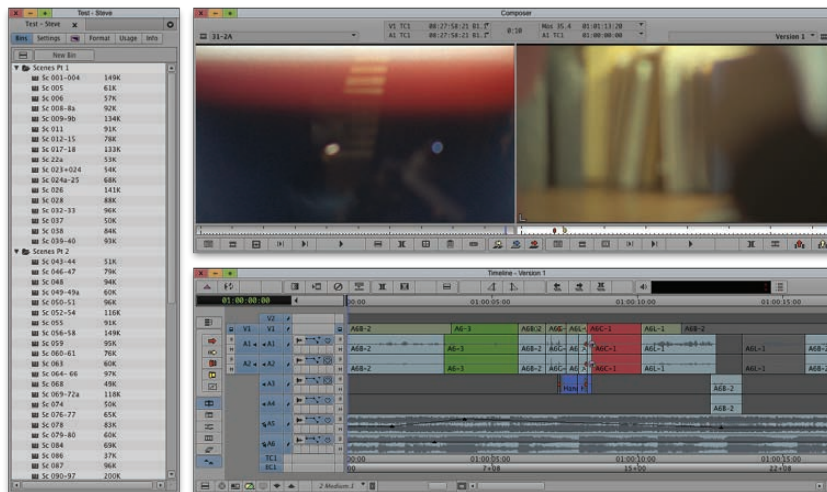
The Project window is divided into tabs that provide a list of all bins, settings and visual effects, as well as information about project format and memory usage. Double-click a bin or setting to open it. Double-click an effect to apply it to a selected clip.

The three primary tabs in the Project Window:

Bins   Settings   Visual Effects
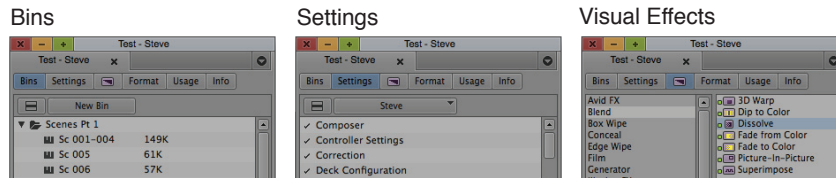
Projects

Your materials will normally be organized into projects. A project is essentially a group of bins and settings collected in a folder. Projects can be stored in several places on disk. With standalone systems they're typically in the Documents folder in your User Folder. With Unity or Isis systems, projects can be shared and will reside on the server. You'll normally create and access projects from the Select Project dialog box. This is the first thing you'll see when you initially start up the system, and you'll need to create a project and a user before you can do much of anything.

Locate your project using the browse button.

Projects in this directory are displayed here.

Shortcuts to common project locations. Private projects are in the Avid Projects folder in your Documents folder.

To switch projects, close the Project window. The dialog box above will reappear, allowing you to open another project or create a new one. For more about user settings see "Users and User Profiles" on page 257.

Modes and Tools

The user interface is structured around several modes, accessed via buttons in the timeline window. They alter the toolset in various ways, optimizing it for specific tasks. Source/Record Mode is the system's basic editing environment, organized around the source and record monitors. Segment Mode allows you to select clips and drag them in the timeline. Trim Mode allows you to adjust transitions, displaying outgoing and incoming video in separate windows. The Effect Editor lets you manipulate visual effects, the

Motion Effect Editor helps you create speed changes, and Color Correction Mode allows you to adjust color.

In the past, these functions were accessed via buttons at the bottom of the Timeline. They now appear along the Timeline's left edge, whenever a clip or sequence is loaded into a monitor. More important, Segment Mode and Trim Mode have been integrated into what Avid calls the Smart Tool. When turned on, it alters the behavior of the mouse cursor as you move it around in the timeline, allowing you to move clips, adjust transitions, and manipulate effects or audio keyframes, all in an integrated way. Each Smart Tool can be independently activated; if you leave them off, you'll be able to work traditionally, using only the tools you need for a specific task.
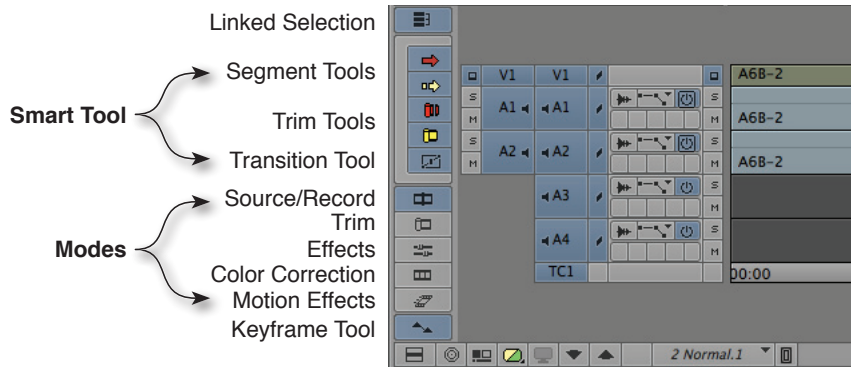

The Smart Tool will be covered in detail in the Timeline chapter. Trim Mode will be covered in the Trim chapter. Audio keyframes are covered in the Audio chapter, and effects and motion effects are covered in the Visual Effects chapter. Source/Record Mode is implicitly covered throughout the book.
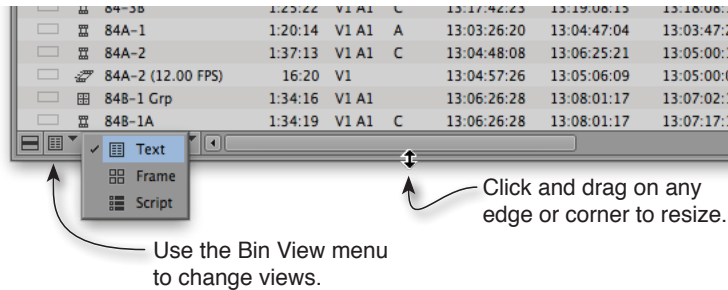
Bins

Bins contain your clips. They can be displayed in several views, allowing you to organize material any way you like. Note that each bin is stored as a separate file on disk, making it easier to isolate a portion of your project and transfer it from one system to another.

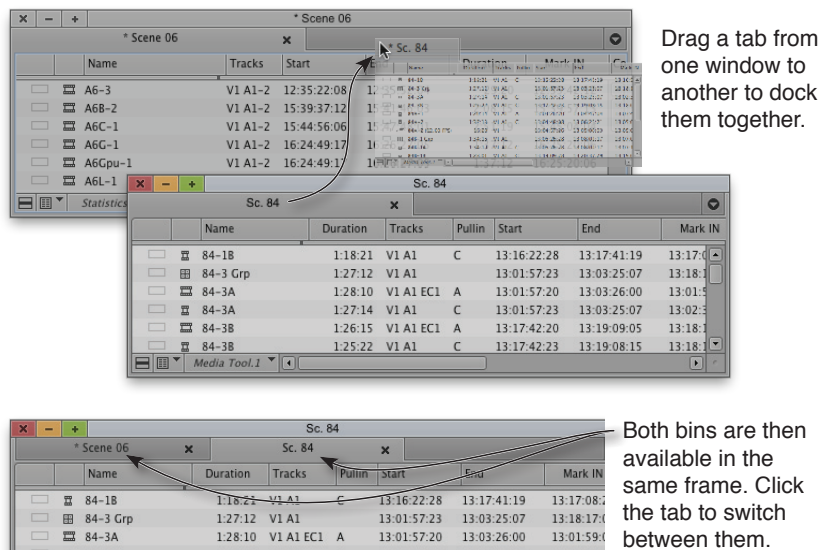Bins displayed in Frame View and Text View.
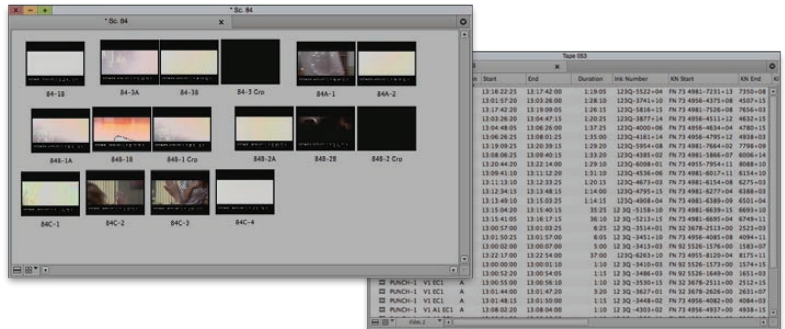
Use the Bin View menu, located at the bottom left of every bin, to change bin views. You can now drag Media Composer windows on all four edges to resize them. A double-arrow cursor appears to make this clear.

Use the Bin View menu to change views.

Click and drag on any edge or corner to resize.

Tabs

New in Version 6, bins and many windows contain tabs. They work much like tabs in a web browser, allowing you to dock multiple windows together inside a single frame, and then switch between them with a single click.


Drag a tab from one window to another to dock them together.

Both bins are then available in the same frame. Click the tab to switch between them.

Clips and Media

The Media Composer architecture makes a fundamental distinction between clips and media. Media are video and audio files on disk; clips are the representations of that media, which you'll use for editing. They contain the metadata associated with the underlying media: timecodes, key numbers and the like. Common clip types include master clips, subclips, group clips and sequences.

Master clips typically match the duration of the underlying media: if you have a five-minute master clip, you'll find five minutes of media for it somewhere on disk. Subclips are sections of master clips, generally created to help you organize your material. For most editing purposes, subclips and master clips can be used interchangeably. Group clips are used for multi-camera editing and are created by aligning and merging multiple, synchronized clips into a single object. Sequences are constructed from edited source clips, and are the primary product of the editing process. Each type of clip is displayed with a unique icon.
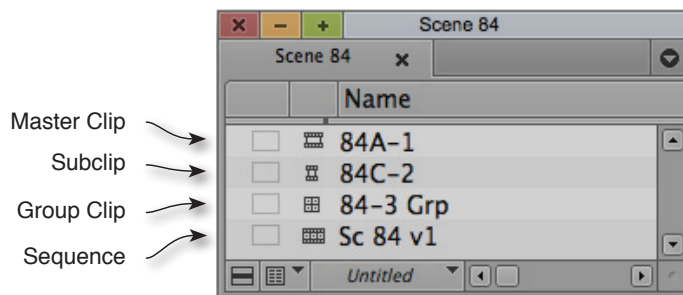
Unlike some editing applications, Media Composer employs an "inheritance" model. When you edit a clip into a sequence and later change certain kinds of data in the source clip, that data will propagate into the clip in the sequence. If you change a clip name after using it for editing, for example, the new name will appear on the sequence clips. Subclips and Group Clips also inherit certain kinds of source changes. For this to work, the bins containing the clips must be exposed to each other by being open in the same editing session. See "How Bin Data is Stored" on page 119 for details.

Managed and Unmanaged Media

Media Composer has long been known for its bulletproof media management, which is achieved by storing all media in a specific, tightly controlled folder, usually named Avid MediaFiles and located at the root level of a drive. As it starts up, the system checks every mounted drive for such a folder and then constantly monitors and indexes their contents. You should avoid manipulating Avid media at the Finder level, and instead use Avid's Media Tool for that purpose (see page 215).

The system also allows you to work with unmanaged media via what's known as Avid Media Access. AMA media can be located anywhere and manipulated via the Finder, but with that added flexibility comes a degree of risk. If you move or rename files, the associated clip will go offline.

You can also convert AMA media to managed media via the Consolidate/Transcode dialog box, and point sequences from one kind of media to the other. Modern workflows often entail an initial link to file-based, camera-original media via AMA and a subsequent transcode to Avid's preferred file types for editing. For more about media management see "Projects and Media" on page 213.

Users and Settings

Media Composer derives much of it's power from the way it can be configured for individual use. You'll customize the behavior of the application using a wide variety of settings panels, listed in alphabetical order in the Settings tab of the Project window. Double-click a setting to open it and make changes. Individual settings are covered, as needed, throughout the book. You can change the behavior of buttons on the keyboard (p. 12), assign menu items to the keyboard for quick access (p. 66), and adjust the data displayed in the Composer (p. 56) and the Timeline (p. 49). You can also create memorized Workspaces and Bin Layouts to place windows where you like them for specific tasks (p. 260).

Avid calls a complete group of settings a User Profile. You can create and switch between profiles from the Settings tab of the project window. This lets you move your settings from one machine to another and allows multiple editors to work on the same machine in a customized way. Note that Version 6 employs a new XML-based settings architecture, and editors are strongly advised to create a new User Profile when moving from previous versions. For more about the settings architecture, see page 255.

Media Composer stores projects, user profiles and media in specific places, which helps the system provide you with a relatively bullet-proof editing environment. Though some file locations can be changed, beginners are best advised to leave files where MC puts them.

Interface Brightness

Adjusting the overall brightness of the interface is probably the most basic setting choice you can make. Select the Settings tab in the Project window and double-click the Interface settings panel. Then drag the Brightness slider to the level you prefer. Text colors automatically invert at the darker settings. You can also change the color used to highlight selected items. Illustrations in this book mostly employ the brightest setting with blue highlighting, but other options are sometimes used for clarity.

Brightness slider.

Highlight color.
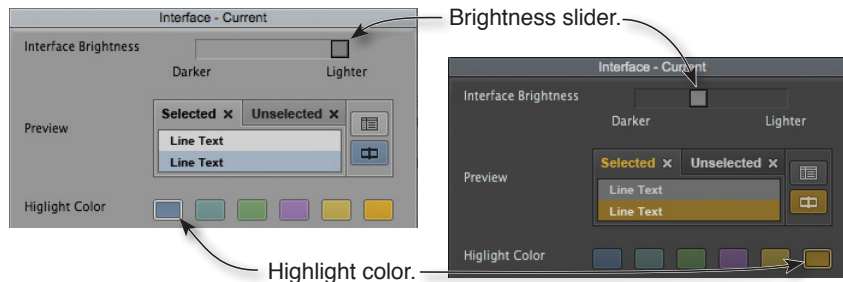
Starting Up the System

Media Composer normally presents you with the Select Project dialog box when it starts up, allowing you to choose the project you want to work on. If you'd rather have the sys-

tem automatically open the project you used last, go to the Interface settings panel, and select Automatically Launch Last Project at Startup.
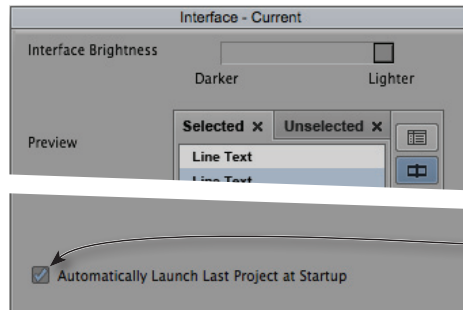
Click here to bypass the
Open Project dialog box
when you start the system.

Projects always open with all bins that were open last time. If you prefer that bins don't open, hold down the Option key while your project starts up. (You only need hold it down when you see the system begin to read in your settings.)

If you start up MC and change your mind you can cancel the startup. Hold down the Command key and tap a period when you see the Media Composer splash screen. (One hit should do it, but it may take a few seconds.)

The Position Indicator

Your current location in a source clip or sequence is displayed with Avid's venerable blue play cursor, known formally as the Position Indicator (and informally as the "blue bar"). Unlike in other editing applications, if all Smart Tools are deactivated you can click anywhere in your sequence to move there, which arguably makes the interface feel more open. If one or more tools are active, you'll need to click in a timecode track or in the Ruler at the top of the timeline window.

Position Bars under the Source and Record
Monitors, with their Position Indicators.
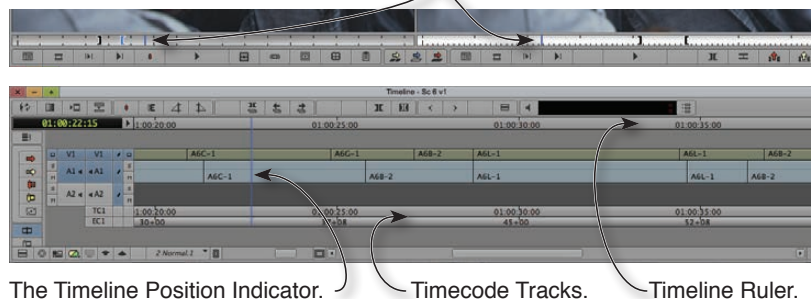
The Timeline Position Indicator.   Timecode Tracks.   Timeline Ruler.

Under the source and record monitors, you'll find Position Bars (not to be confused with the Position Indicator). The position bars represent your clip or sequence in condensed form. Like the Timeline, they display small position indicators, which allow you to move quickly through your material.

Marks and Markers

With Version 6, the icons for Mark In and Mark Out have changed, and Locators have been renamed Markers. Though their names are now similar, their functions are quite different. Marks are used for editing: to identify the beginning or end of a selected portion of material that you want to manipulate. Markers work like bookmarks, letting you add colored dots and text to frames, so you can easily locate them (see page 62).

Menus

In addition to the standard menu bar, the system features pop-up menus that conveniently bring various functions for a window together in one place. Avid calls them Fast Menus. You might hear them referred to as "hamburger menus," because that's what the icon looks like. You'll find them in most windows.
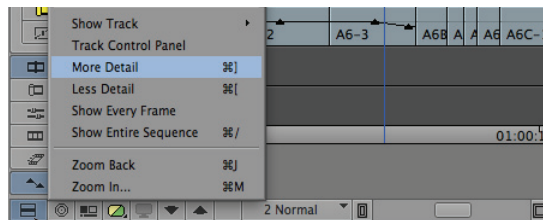
The Timeline Fast Menu.

This book uses angle brackets to indicate simple menu picks. For example, File > New Bin means "pull down the File menu and select New Bin."

Contextual

Contextual menus are enabled throughout the system. If you have a two-button mouse, simply right-click on an interface item to open its menu and make a selection. On the Mac, if you don't have such a mouse, use the standard Mac keyboard shortcut, Control-click. (Because the use of the Control key was changed in Version 5, some traditional keyboard shortcuts were modified. They'll be covered when appropriate in the text.)
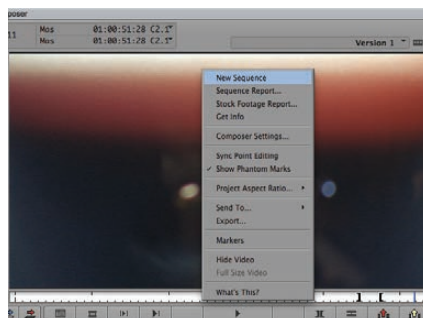
The contextual menu for the record monitor.

Keyboard

Mac and PC

Media Composer is designed to operate identically on the Mac and the PC. For simplicity, this book focuses on the Mac interface, but those of you who are using a PC will find that almost everything translates over. Macintosh keyboard shortcuts are used throughout the text. If you're working on a PC, substitute the Control key for the Command key (⌘) and the Alt key for the Option key.

Shift

In general, you'll use the Shift key to extend a selection. To select a group of sequential items, click on the first one and then Shift-click the last one, or simply click and drag to lasso them all. To select non-adjacent items, click the first one and Command-click each of the others. You can also deselect individual items in a group by Command-clicking them.

Command (Control on the PC)

In the Timeline, the Command key is used to snap the position indicator from cut to cut, or more specifically, from head frame to head frame. You can add the Command key either before or after you start to drag. To snap to tail frames, hold down both the Command and Option keys, instead.

Option (Alt on the PC)

The Option key is used in combination with other commands to modify them and add additional features.

Delete

As in most applications, the Delete key is context sensitive and will change its behavior depending on which window is active when you use it. In the timeline it will delete marks, markers (locators) and tracks. If a Segment tool is active it will delete effects and clips. If the Keyframe tool is active, it will delete audio keyframes. In Trim Mode it will delete match frame edits. And in bins it will remove clips and media files.

Escape

In most dialog boxes, Escape (esc) is a shortcut for the Cancel button.

Decimal Point

The decimal point key on the numeric keypad will insert a double zero (00) into timecode or footage fields.

Mice and Scroll Wheels

The mouse is a big part of your connection to the system, and it's worth spending some time finding the one that works best for you. I personally favor a multi-button mouse, where I can program a button as a double-click. You'll probably spend a lot of time double-clicking to load monitors, and doing it with a single click on a dedicated button is more positive and reduces wrist and forearm strain.

Using a mouse with a scroll wheel can make your work significantly easier. The Mouse settings panel lets you adjust scroll wheel sensitivity. The same setting also allows you to assign Media Composer functions to other mouse buttons.
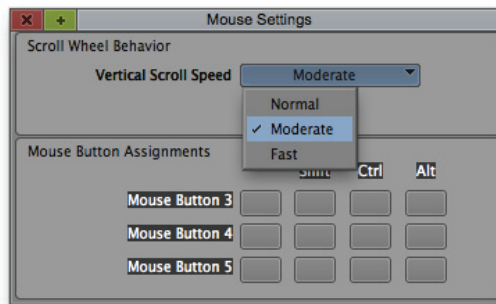
In most windows, you can use the scroll wheel or a trackpad as you would in a word processor, to move windows up and down. You can also scroll horizontally with a mouse that supports it. This can be especially handy in the timeline. With a trackpad, you can typically do this by dragging two fingers side-to-side. (You may need to enable horizontal scrolling in Apple's System Preferences.) But even if your mouse doesn't support horizontal scrolling, you can still scroll left-to-right. Just hold down the Shift key while scrolling up and down.

Undo and Redo

Media Composer uses a clip and sequence-based undo/redo system. You can undo just about anything you might want to do in the source or record monitor, but some of the things you might do in a bin (including the deletion of a sequence), can't be undone. That might seem like a limitation, but the simplicity of this approach has kept editors happy for years.

You can undo via the keyboard or the menu bar. Undo is Command-Z; Redo is Command-R. As you undo or redo, the timeline will change and the position indicator will move to show you what's happening at every step.

Undoing from the menu bar offers additional flexibility because it displays a list of labeled undos and redos. Using the menu, you can jump through a series of steps with a single menu pick. When you release the mouse button the timeline will step through

the intervening events in rapid succession until it brings you backward or forward to the event you selected.

Step forward through your redos.

Step backward through your undos.
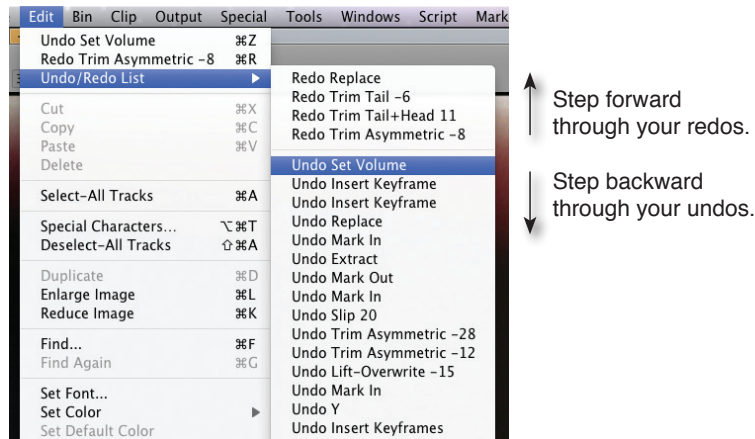
Because the undo system is sequence-based, loading a new sequence into the record monitor will clear the undo list. And the redo list is even more easily cleared. Doing just about anything new—making a mark, or even just loading a clip into the source moni-tor—will clear your redos.

But because some bin events aren't saved in the undo list, it's easy to work around this problem. Say you've made changes to a sequence that you're not sure about. You want to undo them, but you'd like to preserve the current version for comparison. Rather than rely on redo, make a subclip of the sequence (or a portion of it). Then undo as needed. The subclip won't change as you undo (see "Subclips" on page 124).

Another alternative is to have the system remember only record-side events in the undo list. To do this, select Undo Only Record Events in the Edit Tab of Composer Settings. This will make the redo list more resilient; making a source mark or loading a source clip won't clear it. But you won't be able to undo anything you did in the source monitor.

Select Undo Only Record Events to keep source-side actions out of the undo list.