17

Macros

This chapter describes the macros facility which allows three types of macros to be defined:

Button macros represent buttons that appear on the button bar. You can add buttons to the button bar that type in strings, execute keypresses for common options or call functions directly in **Ovation Pro**.

Key macros represent keys on the keyboard allowing them to be redefined. Virtually all the keys may be redefined including special key combinations using Ctrl, Shift etc.

User macros allow common constants to be given simple textual names. They are useful for defining constants that you may wish to use several times in other macro definitions.

17.1 The Macros Dialogue Box

Menu⇨Misc⇨Macros…

Choose **Misc⇨Macros** to display the **Macros**
dialogue box *(fig. 17.1)*. Each row in the table
represents a single macro, and comprises:

• The macro name.

• An optional icon used to represent the macro
  on the button bar (button macros only).

• The actual macro definition.

• An option which determines whether the
  button will appear on the button bar (button
  macros only).

The options **Button**, **Key** and **User** control the
type of macros being displayed. By default
Button is selected, causing the dialogue box to
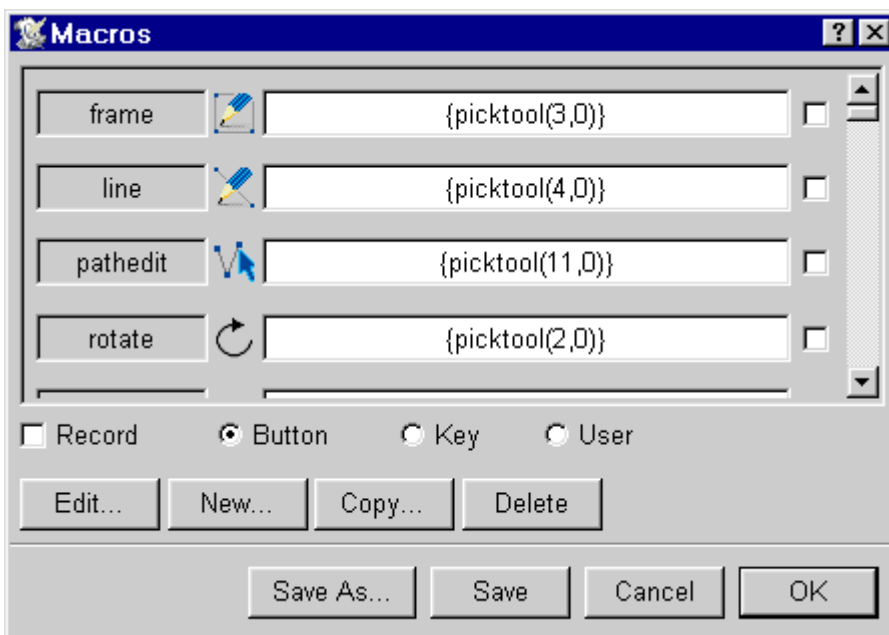display all the button macros.

*Fig. 17.1 - The **Macros** dialogue box showing the buttons that have been defined.*

17.2 Creating Button Macros

Choose **Button** on the **Macros** dialogue box to display the button macros, then click on **New** to display the **New button** dialogue box *(fig. 17.2)*.

Type in a name for the button you require (maximum 12 characters). The button name must not be the same as any other macro already defined or the name of any keyboard key. So you cannot define buttons called A, h, F3, Print etc.

The width of the button displayed on the button bar is determined by the width of the text you type, so choose short names if you want to fit lots of buttons on the button bar. The button name doesn't have any significance if you choose to use a sprite to represent the button.

If you wish to assign an icon to your button, click on the icon to the right of the **Sprite** option to display the button box *(fig. 17.3)*.

The button box is a palette of sprites that may be used for button legends. Use the vertical scroll bar to scroll through the entire list, and choose the sprite you require by clicking on it. The button box will then be closed and the sprite name displayed in the **New** dialogue box. If you should then decide not to use the sprite, you can deselect the **Sprite** option.

Fig. 17.2 - The **New button** box.

When you have completed the dialogue box, click on **OK** to create the button.

The new button name will appear in the first column at the bottom of the macro list, but at this stage doesn't yet appear on the button bar. If you have assigned a sprite to the button, this will be displayed in the second column.

The icon in the third column contains the actual definition, which at this stage is blank. If you type some text into this icon, choosing the button on the button bar will type the text into the document. Full details of how to define macro bodies are given later in this chapter.

The final column is an option which determines if the button appears on the button bar. *Ovation Pro* is supplied with a wide range of predefined buttons, but only a small selection are actually enabled *(see 17.7)*.
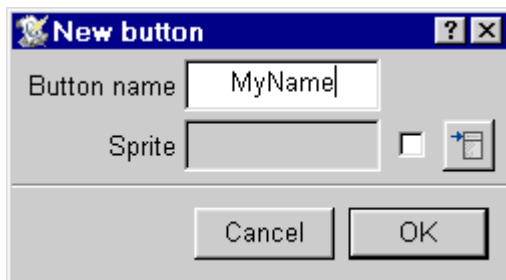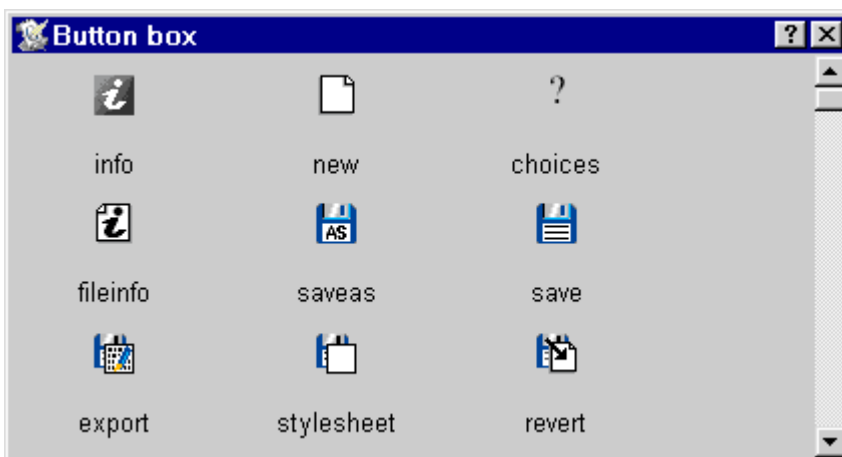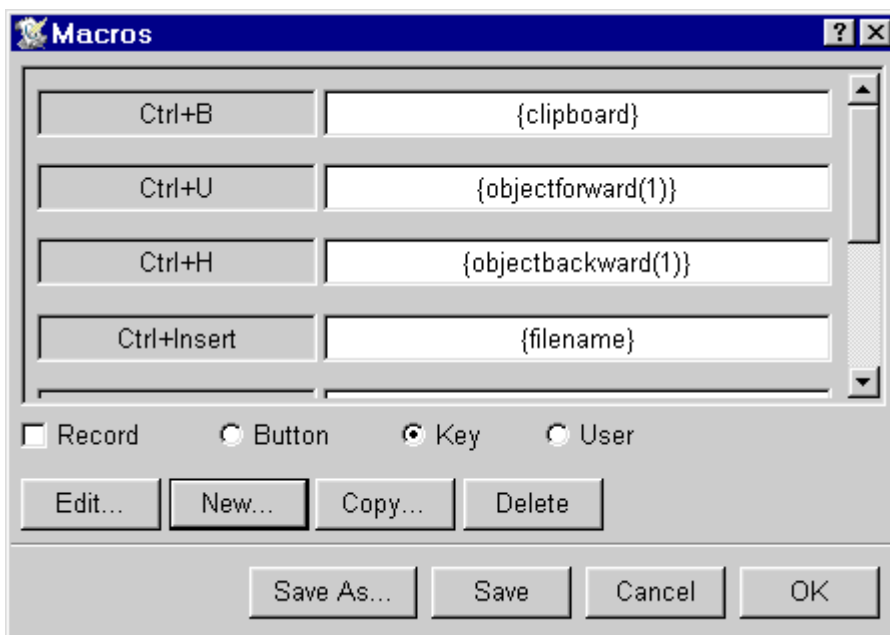

Fig. 17.3 - The button box.

17.3 Creating Key Macros

Choose **Key** on the **Macros** dialogue box to display the key macros, then click on **New** to display the **New key** dialogue box *(fig. 17.4)*.

Now press the key or key combination that you wish to define. You may define any key on the main keyboard or keypad except for Escape, Break and Return. In addition you may also define key combinations using one or more of the Ctrl, Shift, Alt and Windows keys.

The key name you have chosen is displayed in the **New key** dialogue box.

When you have correctly chosen the key you wish to define, click on **OK** to close the dialogue box.

The new key macro name is displayed in the first column at the bottom of the key macro list *(fig. 17.5)*. The icon in the second column is for the actual definition, which at this stage is blank. If you type some text into this icon, it will be typed into the document when the keypress is invoked. Full details of how to define the macro bodies are given later in this chapter.
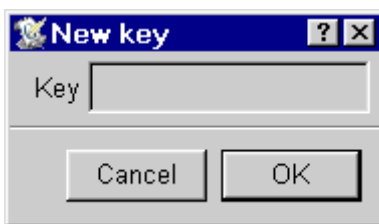
*Fig. 17.4 - The **New key** dialogue box.*

*Fig. 17.5 - The **Macros** dialogue box showing the keys that have been defined.*

17.4 Creating User Macros

Choose **User** on the **Macros** dialogue box to display the user macros, then click on New to display the **New macro** dialogue box *(fig. 17.6)*.

Type in a name for the macro you require (maximum 12 characters). The name must not be the same as any other macro already defined or the name of any keyboard character. So you cannot define buttons called A, h, F3, Print etc.

If you intend to use this macro in other definitions, it will be an advantage to keep the name as short as possible.

When you have correctly typed the user macro name, click on **OK** to close the **New macro** dialogue box.

The new user macro name will be displayed in the first column at the bottom of the macro list *(fig. 17.7)*. The icon in the second column is for the actual definition, which at this stage is blank. Full details of how to define macro bodies are given overleaf.
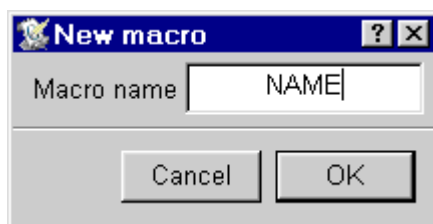
*Fig. 17.6 - The **New macro** dialogue box.*
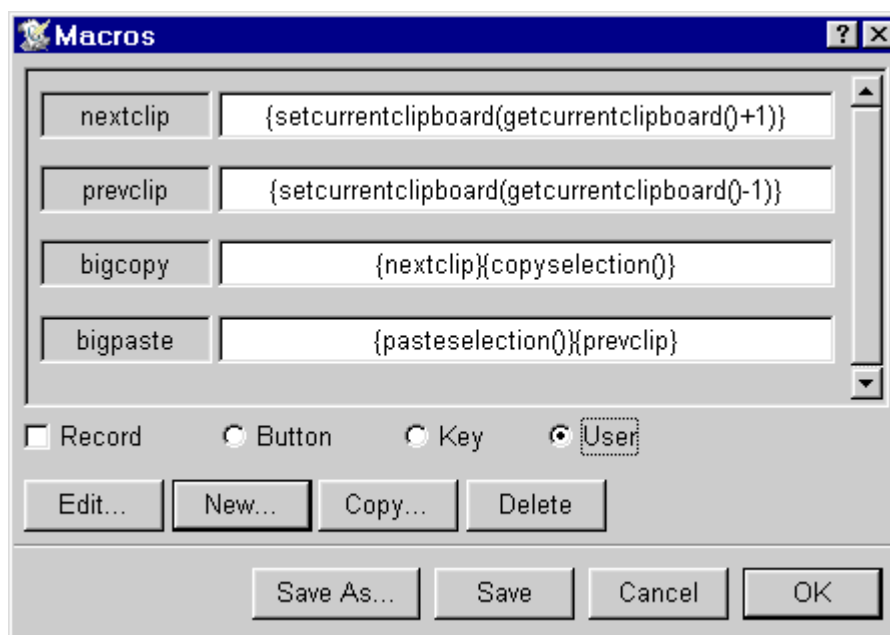
*Fig. 17.7 - The **Macros** dialogue box showing the user macros that have been defined.*

17.5 Defining Macros

To define a macro, left click in the definition icon to the right of the macro name, and type in a string. The string may contain all the usual ASCII characters, but must not begin with { or <.

In addition to the normal printable characters, you can introduce any ASCII characters in the range 0 to 31 or 127 to 255 using special escape sequences *(see Appendix B)*.

If you wish to start the string with { or <, you must use the alternative sequences |{ or |<.

John	types John
Regards|M	types Regards followed by CR
|!|O	types • (ASCII code 143)
|<6>	types the string <6>

Key expansions

If the definition string corresponds to the name of a key enclosed in braces { }, that key will be invoked *(see Appendix C)*. All the keys on the keyboard may be used except Return, Escape and Break. Keys may also be prefixed by the following sequences:

S_	Shift plus key
C_	Ctrl plus key
A_	Alt plus key
W_	Window plus key
CS_	Ctrl Shift plus key
AS_	Alt Shift plus key
AC_	Alt Ctrl plus key
ACS_	Alt Ctrl Shift plus key
WCS_	Window Ctrl Shift plus key
WAS_	Window Alt Shift plus key
WAC_	Window Alt Ctrl plus key
WACS_	Window Alt Ctrl Shift plus key

If a key in a definition has already been redefined using a key macro, the new definition will be used unless the key name is preceded by a single quote character. In that case, the original operation of the key is invoked i.e. the one predefined in ***Ovation Pro***.

{F1}	invoke the keypress F1
{C_V}	invoke keypress Ctrl V
{S_F3}	invoke the keypress Shift F3
{CRight}	invoke the keypress Cursor Right
{F3}	invoke the keypress F3
{'F3}	invoke the original keypress F3

Glyph names

If the definition string corresponds to the name of a glyph *(see Appendix H)* enclosed in braces { } the relevant character is introduced. This will often be a more natural way of producing special characters than using the | code notation.

Macro expansions

If the definition string is a macro name enclosed in braces { } it will be evaluated.

| {dtp} | expands the user macro dtp |
| {mc1}{mc2} | expands mc1 and mc2 |

Function expansions

If the definition string enclosed in braces { } doesn't match a macro name or keypress, it is passed to the script language and executed as a function.

| {setalign(1)} | calls setalign() |

System expansions

If the definition string is enclosed in angle brackets <> then it is evaluated in a special way. Firstly if the string represents a number (decimal or hex) it introduces a character with the relevant code value. If it is further enclosed in % % it is evaluated as an environment variable otherwise it is read from the registry.

Examples.

<65>
Character code 65 i.e. 'A'.

<%USERNAME%>
Environment variable. These can also be read using the getenvs() script language function.

<HKLM\Software\DavidPilling\Dictionaries>
Registry variable, HKLM is used as an abbreviation for HKEY_LOCAL_MACHINE. Similar abbreviations are understood for the other root keys in the registry.

17.6 Other Macro Operations

Recording Macro Definitions

The previous pages describe how to type in macro definitions, but it is possible to record definitions directly from the document. It is useful if you wish to program a button, key or macro with a complicated key sequence.

First, choose the macro you wish to define by left clicking in its definition icon. Select the **Record** option, and click in the document window without closing the **Macros** window. Now anything typed into the document will be recorded in the macro definition, including any special keypresses. Switch off recording when you have finished by deselecting the **Record** option.

Expanding Macros

Double-click on the macro name to expand it.

Editing a Button Macro

Click on **Edit** to display the **Edit button** dialogue box *(fig. 17.8)*. You may use this dialogue box to change the sprite assigned to the button.

Please note that the **Edit** option is only available for button macros.

Copying a Macro

This option copies the macro definition that contains the caret. The **Copy** dialogue box allows you to type in a different name for the new copy. Operation of this dialogue box is identical to that for the New option described previously.

Deleting a Macro

This option deletes the macro definition that contains the caret. The macro is not completely deleted until **OK** is clicked, so if you wish to restore the deleted macro, click on **Cancel** and then reopen the **Macros** dialogue box.

Saving the Macros

Click on Save to save all the macro definitions so that they will be loaded automatically each time *Ovation Pro* is run.

Click on Save As to display a standard save box, allowing you to save macros in a named file. To reload the macros, double-click the file or drag it to an *Ovation Pro* window. Loading a macros file in this way overwrites any macros currently loaded.
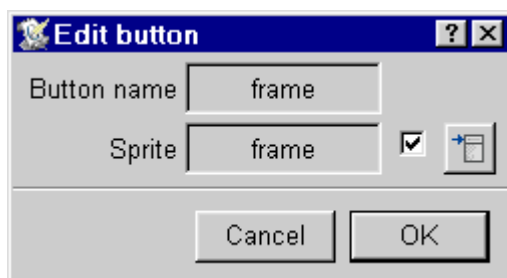
*Fig. 17.8 - The **Edit button** dialogue box.*

17.7 Summary of Pre-defined buttons

The following pages list all the predefined buttons available in *Ovation Pro*. By default only a selection of these are enabled *(see 2.8)*, but you may enable the buttons that you require or add your own buttons. Many of the buttons may be used as templates for your own buttons. So for example, the button **Courier** sets the font to Courier but you may copy the button and edit its definition to set another font. To do this you will need some knowledge of the *Ovation Pro* script language and functions, which are described in detail in the separate Script manual.

More button sprites can be added via a `Buttons.spr` file in the Custom applet. Some buttons present on the Button bar may originate from an applet and these have their own Buttons files.

Remember to click on **Save** to save any changes you make.

Tools

- **Select** tool.
- **Frame** tool.
- **Rotate** tool
- **Magnify** tool.

Help menu

- *Ovation Pro* **Info** dialogue box *(see 2.2)*.

File Menu

- **File info** dialogue box *(see 3.1)*.
- **Save** *(see 3.9)*.
- **Save** (without prompt).
- **Save story/picture** *(see 3.9 & 10.2)*.
- **Save stylesheet** *(see 15.1)*.
- **Revert to saved** *(see 3.4)*.
- **Print** dialogue box *(see 3.10)*.
- **Mail merge** dialogue box *(see 12.5)*.

Edit Menu

- **Select all** *(see 3.5)*.
- **Clear** selection *(see 3.5)*.
- **Cut** selection *(see 3.6)*.
- **Copy** selection *(see 3.6)*.
- **Paste** selection *(see 3.6)*.
- **Delete** selection *(see 3.6)*.
- Show/hide **Clipboard** *(see 3.6)*.
- **Embed** object from clipboard *(see 8.10)*.
- **Undo** *(see 3.4)*.
- **Redo** *(see 3.4)*.
- **Find** dialogue box *(see 3.8)*.
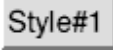- **New** document *(see 11.2)*.

View Menu

New view *(see 7.2)*.

Options dialogue box *(see 7.3)*.

Show/hide **Toolbox** *(see 7.3)*.

Show/hide **Info palette** *(see 7.3)*.

Show/hide **Rulers** *(see 7.3)*.

Show/hide **Pasteboard** *(see 7.3)*.

Show/hide **Pictures** *(see 7.3)*.

Show/hide **Guidelines** *(see 7.3)*.

Show/hide **Print margins** *(see 7.3)*.

Enable/disable **Facing pages** *(see 7.3)*.

Show/hide **Invisibles** *(see 7.3)*.

Grid dialogue box *(see 7.4)*.

Enable/disable grid *(see 7.4)*.

Zoom dialogue box *(see 7.5)*.

75% zoom *(see 7.5)*.

125% zoom *(see 7.5)*.

Zoom to **Fit window** *(see 7.5)*.

Zoom to **Fit screen** *(see 7.5)*.

Text/Picture Menu

Modify text dialogue box *(see 4.6)*.

Font menu *(see 4.2)*.

Set font to Courier.

Size menu *(see 4.3)*.

Set type size to 13pt

Effect menu *(see 4.4)*.

Set text to **Normal** *(see 4.4)*.

Set text to **Bold** *(see 4.4)*.

Set text to **Italic** *(see 4.4)*.

Underline text *(see 4.4)*.

Reverse out text *(see 4.4)*.

Set text to **Superscript** *(see 4.4)*.

Set text to **Subscript** *(see 4.4)*.

Text **Colour** dialogue box *(see 4.5)*.

Text **Format** dialogue box *(see 5.4)*.

Alignment menu *(see 5.2)*.

Left align text *(see 5.2)*.

Centre align text *(see 5.2)*.

Right align text *(see 5.2)*.

Fully **Justify** text *(see 5.2)*.

Single space line spacing *(see 5.3)*.

Double space line spacing *(see 5.3)*.

Set 14pt absolute leading *(see 5.3)*.

Display **Tabs** ruler *(see 5.5)*.

Style Menu

	Style menu *(see 6.6)*.
	Edit style dialogue box *(see 6.2)*.
Style#1	Apply `Style#1` to text *(see 6.6)*.
	Remove Local effects *(see 4.1)*.

Object Menu

	Modify object dialogue box *(see 9.1)*.
	Border dialogue box *(see 9.6)*.
	Text flow dialogue box *(see 9.7)*.
	Duplicate dialogue box *(see 9.8)*.
	Shape dialogue box *(see 9.9)*.
	Bring to **Front** *(see 9.10)*.
	Put to **Back** *(see 9.10)*.
	Group/Ungroup objects *(see 9.11)*.
	Make local/master *(see 9.12)*.
	Snap to grid *(see 9.13)*.

Page Menu

	Edit master pages *(see 11.3)*.
	Insert **New chapter** *(see 11.4)*.
	Edit **Page guidelines** *(see 11.3)*.
	Modify chapter *(see 11.6)*.
	Delete chapter *(see 11.5)*.
	Insert page *(see 11.7)*.
	Delete page *(see 11.7)*.
	Goto page *(see 11.1)*.

Misc Menu

	Check word *(see 14.4)*.
	Check story *(see 14.3)*.
	Check document *(see 14.5)*.
	Check from caret *(see 14.3)*.
	Check as you type *(see 14.6)*.
	Dictionary dialogue box *(see 14.7)*.
	Characters box *(see 3.2)*.
	Insert menu *(see 3.2)*.
	Insert **Chapter number** *(see 3.2)*.
	Insert **Page number** *(see 3.2)*.
	Insert **Date** *(see 3.2)*.
	Insert **Active date** *(see 3.2)*.
	Insert **Time** *(see 3.2)*.
	Start **New page** *(see 3.2)*.
	Start **New line** *(see 3.2)*.
	Insert **Hard space** *(see 3.2)*.
	Insert **Hard hyphen** *(see 3.2)*.
	Insert **Soft hyphen** *(see 3.2)*.
	Insert **Merge tag** *(see 3.2)*.
	Preferences dialogue box *(see 15.11)*.
	Edit colour dialogue box *(see 16.2)*.
	Macros dialogue box *(see 17.1)*.
	Choices dialogue box *(see 14.3)*.