

Inter-Office Memorandum

To	Bravo users	Date	September 25, 1982
From	Ed Taft	Location	PARC/CSL
Subject	Bravo 7.6	File	[Maxc]<AltoDocs>Bravo76.press

XEROX

This memo describes the differences between Bravo 7.6, the current version, and Bravo 7.2, the version described in the most recent edition of the Alto User's Handbook. Note that this documentation applies only to Bravo 7, and not to other "generations" of Bravo such as Bravo 8 or BravoX. Bravo 7.6 runs on any Alto and on any D-machine emulating an Alto.

Bravo is no longer being actively maintained. During the past several years, new releases have been made only when unavoidable, to adapt to environmental changes or to fix catastrophic bugs.

I wish to publicly thank Bob Lansford, who "rescued" the Bravo sources which were long thought to be lost. Charles Simonyi, Greg Kusnick, and Lyle Ramshaw also contributed to releases since Bravo 7.2.

New feature: color

This release of Bravo contains facilities for generating documents containing color. (Earlier versions of Bravo actually did have color facilities, but the Press files they generated included color information in an obsolete format.) This feature was contributed by Bob Lansford.

This memo contains color information. Print it on a color printer if you have access to one!

Inputting color

In addition to the standard looks, each character has a *color* attribute. To change the color of some text, select it and issue the command Look . (period) followed by the desired color, which is one of:

A	Aqua *	P	Pink *
B	Black	R	Red
C	Cyan	S	Smoke *
D	Dark Brown *	T	Turquoise *
G	Green	U	Ultraviolet *
L	Lime *	V	Violet
M	Magenta	W	White
O	Orange *	Y	Yellow

(The names for these colors are the same as in Sil, except that Sil uses "N" for Black.) These looks may be changed only by a direct Look command; there is no corresponding control character for changing color looks while you are typing text. The colors marked with an asterisk require a half-tone process to print, so the resolution of text in these colors is considerably lower than for the other colors, which are primaries or equal mixtures.

To highlight black text with a colored background, assign the desired color to it and also underline it (using Look _). Here is an example: 

The Look _ command will display the color of the selected text.

An unfortunate aspect of the implementation is that the color of a character and the name of a named TAB (see Bravo manual, section 3.5) are stored in the same place. Assigning a color look to a TAB character will actually change the name of the TAB (i.e., the stop that it jumps to). While this is not really restrictive after all, TABs are invisible, so their color is irrelevant it can be a source of difficulty when making wholesale color changes. (Fortunately, changing the name of a plain TAB has no undesirable effect.) This does result in one restriction: you can't apply highlighting to TABs.

Printing color documents

You can specify the names of your default black-and-white and color printers independently. In your User.cm file, there should be an entry of the form:

```
[HARDCOPY]
PREFERREDFORMAT: Press
PRESS: name of your black-and-white printer
COLOR-PRESS: name of your color printer
PRINTED-BY: "$"
```

When you issue the Hardcopy command, if the document you are printing contains any color information, it will be sent to your color printer after requesting confirmation from you; otherwise it will be sent to your black-and-white printer. (Of course, you can redirect the document to an arbitrary printer using the @ hardcopy option.)

The B hardcopy option forces Hardcopy to send the document to your black-and-white printer regardless of the document's color content. It's ok to print a color document on a black-and-white printer, but the printing server will put some warning messages on the break page.

Default looks

You can now specify the default character looks in your User.cm. This feature was contributed by Lyle Ramshaw. To enable it, include the statement:

```
LOOKS: looks
```

in the [BRAVO] section of your User.cm. *looks* is a word containing one or more of the following characters:

b	bold
i	italic
g	graphic
v	visible
0 .. 9	font 0 through 9

These looks apply in the following cases:

1. They determine the presentation of unformatted (plain-text) documents, including the text in the system window.
2. They define the action of the CLR key and the Look CLR command (see Bravo manual, section 3.1).

Other changes

Bravo now respects your capitalization of file names during the Put and Hardcopy File commands.

Bravo has undergone a modest weight loss (about 30 pages) by jettisoning all the code for printing on Ears.

Some of the errors and other messages have been revised, so be sure to obtain new copies of Bravo.error and Bravo.messages as well as Bravo.run.

For expert Bravo users, there exists an alternative Bravo.messages file in which most of the common messages (in the system window) are considerably abbreviated. Bravo runs noticeably faster when using these messages, since it has to do less work per command to update the system window. If you wish to use the abbreviated messages, retrieve Bravo.shortMessages and call it Bravo.messages on your Alto disk. Be sure to execute Bravo/i after doing so.

A number of bugs have been fixed. Notable recently-fixed bugs include:

- the automatic retry during Hardcopy transmission didn't always work;
- underlined superscripts didn't work;
- executing Hardcopy command occasionally trashed the document if a Put was done subsequently;
- Hardcopy of text containing undefined fonts caused generation of a malformed font directory in the Press file;
- Disk errors weren't reported properly.

A vast number of other bugs are known to exist but are unlikely ever to be fixed.