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Proposal to include four-arrow symbols in Unicode

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Abstract

This is a proposal for adding 4 arrow characters, which show arrows pointing in four directions.

There are many arrow symbols in Unicode, but none of arrows pointing in four directions.

They are mostly found as cursor icons in popular desktop operating systems, indicating the possibility of moving a user interface element in all directions, or the possibility of enlarging it.

1. Introduction

Graphical operating systems, in use since many decades, make use of different cursor pointers which change when there is a different action which can be performed when moving the cursor over some specific points.

For example, when moving over the left or right border of an operating system window, the cursor changes to a double arrow: ↔, which is already included in Unicode as U+2194.

However, there are some cursors that have been in use for many decades, yet they still aren't available as Unicode characters. These are:

✣ and ✥, which are cursors that indicate the possibility of moving the window, or any other element, just by pressing on the element and dragging it around.

⤫ and ⤢, which are rotated version of the previous cursors, which may again indicate the possibility of moving a graphical element, or may indicate the possibility of enlarging it.

Adding these symbols would simplify and unify the writing of user guides where the description of the behavior of a software application needs to talk about these behaviors.

2. Suitability for inclusion

These symbols do not appear in the Archives of Notices of Non-Approval. These symbols have been used and are still actively used in many (if not all) of the major operating systems. The ✣ and ✥ symbols, particularly, have an immediate meaning associated by the regular operating system user as "this element may be moved around". Semantically identifying these symbols allows for

textual search, and reduce the use of binary images and single purpose symbol fonts in user guides and manuals.

Moreover, these symbols can sometimes be obtained by overlapping two or more already available Unicode characters, but such practice is not always available in written documents (this can be done using some specially crafted HTML and CSS, but not in a regular word processor document).

3. Evidence of use in running text

I myself found the need to use these characters while writing user manuals for software while at work for my company. Here it is an excerpt from one of such manuals:

> ←↕→(MOVE) moves the selected object [...] up, down, left or right.

(In the text, the ←↕→ sequence has been chosen in order to avoid inserting an image, since the  character is not available, but it would have been a better fit.)

Looking on the Internet, using a search engine, the words “move cursor” return plenty of images of the four-arrows (as it had been in use by operating systems from decades), and in particular another technical document makes use of such character, the Mozilla Developer Manual for CSS:

> `move`  The hovered object may be moved.

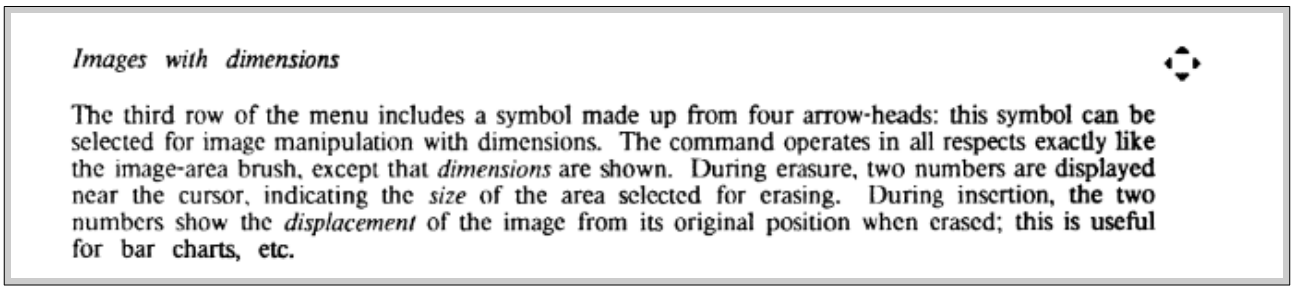
Here is an example of two people discussing a problem in a software program:

> If this  is the cursor you're seeing, it's intended for moving the program's window to a different place on the screen.

Here is an excerpt of the GIMP program, describing the Move Tool, which is represented by the four-arrows icon:

> **4.3.1. Activating the Tool**
>
> You can access the Move Tool in different ways:
>
> - From the image menu bar Tools → Transform Tools → Move,
> - By clicking the tool icon:  .

Here is an excerpt of the Xerox Alto User’s Handbook, where a symbol which can be considered a font variation of one of these four-arrow symbols is used:



Images with dimensions

The third row of the menu includes a symbol made up from four arrow-heads: this symbol can be selected for image manipulation with dimensions. The command operates in all respects exactly like the image-area brush, except that *dimensions* are shown. During erasure, two numbers are displayed near the cursor, indicating the *size* of the area selected for erasing. During insertion, the two numbers show the *displacement* of the image from its original position when erased; this is useful for bar charts, etc.

(A copy can be downloaded from here)

4. Character properties

Suggested character properties for the proposed symbols are shown below:

```
2B74;UP DOWN LEFT RIGHT ARROW;So;0;ON;;;;;N;;;;;
2B75;NORTH-WEST SOUTH-EAST NORTH-EAST SOUTH-WEST ARROW;So;0;ON;;;;;N;;;;;
2B96;UP DOWN LEFT RIGHT TRIANGLE-HEADED ARROW;So;0;ON;;;;;N;;;;;
2B97;NORTH-WEST SOUTH-EAST NORTH-EAST SOUTH-WEST TRIANGLE-HEADED ARROW;So;0;ON;;;;;N;;;;;
```

5. Potential Issues

Some of the proposed symbols can already be displayed by HTML, using some tricks which overlap already existing Unicode characters. The HTML/CSS example is shown here.

However, it would be desirable to have these symbols as single characters, in order to allow word processor software to insert it, without the need to use fancy/complex tricks to display them, or raw image insertion in running text.

The proposed symbols are not the kind of a traffic sign; for example, one can not refer to them as “the stop sign”, or “the emergency exit sign”. Actually, it is very difficult to give a name to them, such as “the four-arrows”, “the four-arrows with filled ending”, “the four-arrows looking north-west through south-east, plus south-west through north-east”. One name people may give to the first two is “the move indicator”, or “the move cursor”, but just looking at them, people immediately understand their meaning.

6. Conclusion

Looking at the Unicode symbol guidelines, the four-arrow symbols ✢✣⤧⤨ are a good fit for addition to Unicode. The first two have been in use in computer operating systems since decades. Their meaning is well-understood by the reader and is now well-defined. Being able to search for it in text would be useful. It completes a class of symbols already in the standard (the arrow ones), actually combining some of them into a single character. Finally, it is letter-like in the sense that it should match the surrounding font style.

Acknowledgments:

- The author took some inspiration for writing this proposal from Proposal to Include IEC Power Symbols and Proposal for addition of Group Mark Symbol