

# *Text2Events protocol*

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## 1. Network Communication

*Text2Events* is a desktop application that enables an automated control of the mouse and keypad by interpreting a string that is received through network communication.

The network communication is established by opening a port in the local host whose port number by default is 9000. It is this port from which the commands are read as strings for further parsing and execution.

“stop”: command that terminates the connection with *Text2Events*

## 2. Commands

### 2.1. Mouse

#### 2.1.1. *Mouse buttons*

“click center”: presses and releases the center mouse button.

“click left”: presses and releases the left mouse button.

“click right”: presses and releases the right mouse button.

“press center”: presses the center mouse button without releasing it.

“press left”: presses the left mouse button without releasing it.

“press right”: presses the right mouse button without releasing it.

“release center”: releases the center mouse button.

“release left”: releases the left mouse button.

“release right”: releases the right mouse button.

#### 2.1.2. *Mouse movements*

In all cases below, X and Y refer to unsigned positive integers represented as a String.

“move X Y”: moves the mouse to the coordinate (X, Y), where X and Y are positive integer numbers.

“move relative X up”: moves the mouse X pixels up from its current position. X must be a positive integer.

“move relative X down”: moves the mouse X pixels down from its current location. X must be a positive integer.

“move relative X right”: moves the mouse X pixels right from its current location. X must be a positive integer.

“move relative X left”: moves the mouse X pixels left from its current location. X must be a positive integer.

“move relative X northeast”: moves the mouse X pixels from its location with an angle of 45° from the x axis. X must be a positive integer.

“move relative X northwest”: moves the mouse X pixels from its location with an angle of 135° from the x axis. X must be a positive integer.

“move relative X southeast”: moves the mouse X pixels from its location with an angle of -45° from the x axis.

“move relative X southwest”: moves the mouse X pixels from its location with an angle of 225° from the x axis.

“wheel scroll X up”: rotates the scroll wheel X notches up, where each notch is equivalent to 3 clicks on the scroll bar arrow. X must be a positive integer.

“wheel scroll X down”: rotates the scroll wheel X notches down, where each notch is equivalent to 3 clicks on the scroll bar arrow. X must be a positive integer.

## 2.2. Keyboard

In all cases below N refers to a physical key from the primary keyboard. For example, ! is not a valid N since there is not a physical representation of it on the primary layer of the keyboard.

If there is a graphic representation in Unicode of the key, N stands for the representation itself. If there is not a graphic representation of the key, one of the Ns listed below may be chosen.

In the case of typing a key, combination of keys is supported. Legal combinations are those of one, two or three different modifiers (alt, control, and/or shift) that precede a general key either from the list below or on its Unicode representation, or a cursor control key from the list.

“type key N”: presses and releases the key represented by N, where N may be a legal combination of keys.

“press key N”: presses the key represented by N without releasing it.

“release key N”: releases the key represented by N.

### 2.2.1. *List of keys (Ns)*

#### 2.2.1.1. General

“backspace”: backspace key.

“caps lock”: caps lock.

“context menu”: Microsoft Windows “menu” key.

“delete”: delete (supr) key.

“enter”: enter or return key.

“escape”: escape (esc) key.

“function X”: fX function key (f1-f12), where X refers to an unsigned integer between 1 and 12 (both inclusive).

“num lock”: number lock.

“numpad X”: X numpad key, where X refers to an unsigned integer between 0 and 9 (both inclusive).

“pause”: pause key.

“print screen”: print screen key.

“space”: space bar.

“tab”: tab key.

“windows”: Microsoft Windows “Windows” key.

#### 2.2.1.2. Modifiers

“alt”: alt key.

“control”: control (ctrl) key.

“shift”: shift key.

#### 2.2.1.3. Cursor control

“down”: down arrow key.

“end”: end key.

“home”: home key.

“insert”: insert key.

“left”: left arrow key.

“page down”: page down key.

“page up”: page up key.

“right”: right arrow key.

“up”: up arrow key.