

Part I

Tutorials

0.1 Quick Start

First Example: Hello World

Step 1: Start a new sandbox-mode game

In the grand tradition of programming tutorials, the first example will be how to make a script that does nothing more than print the words "Hello World" on the screen. The purpose of this example is to show where you should put the files, how to move them about, and how to get one to run on the vessel.

(You can use kOS in a career mode game, but it requires a part that you have to research which isn't available at the start of the tech tree, so this example will just use sandbox mode to keep it simple.)

Step 2: Make a vessel in the Vehicle Assembly Bay

Make the vessel contain any unmanned command core, a few hundred units of battery power, a means of recharging the battery such as a solar panel array, and the "Comptronix CX-4181 Scriptable Control System". (From this point onward the CX-4181 Scriptable Control System part will be referred to by the acronym "SCS".) The SCS part is located in the parts bin under the "Control" tab (the same place where RCS thrusters and Torque Wheels are found.)

Step 3: Put the vessel on the launchpad

Put the vessel on the launchpad. For this first example it doesn't matter if the vessel can actually liftoff or even has engines at all.

Step 4: Invoke the terminal

Rightclick for the SCS part on the vessel and then click the button that says "Open Terminal".

Note that if the terminal is semi-transparent, this means it's not currently selected. If you click on the terminal, then your keyboard input is directed to the terminal INSTEAD of to piloting. In other words if you type W A S D, you'll actually get the word "wasd" to appear on the terminal, rather than the W A S D keys steering the ship. To switch back to manual control of the game instead of typing into the terminal, click outside the terminal window anywhere on the background of the screen.

Step 5: See what an interactive command is like

You should now see an old-school looking text terminal like the one shown below. Type the line:

```
CLEARSCREEN. PRINT "==HELLO WORLD==".
```

into the terminal (make sure to actually type the periods (?.?) as shown) and hit ENTER. Note that you can type it in uppercase or lowercase. kOS doesn't care.

0.2 Design Patterns

0.3 PID Loops

0.4 Execute Node Script