**SerialOTG and Physicaloid in app inventor 2**

The built-in function Serial only works with CdcAcm adapters as used by original Arduino Uno. This extension can replace the built-in function in most applications without change. It works with the most common adapters. It corrects a number of problems and adds functions to make it more useful.
The new Physicaloid library is built on the latest and most updated library found on github (Apache License, Version 2.0). It has been modified to accept more USB to serial chips and a number of problems has been resolved and some code has been rewritten. The library and the extension has been refactored to make it coexist with the built-in Serial component and Physicaloid library. It can now be used with AI Companion.
It has been tested with a Lenovo 3500FL/Android 7.1 and the most common adapters:
It has also been checked on devices with Android 4.1, Android 8.1, Android 10.

PL2303, PL2303HX, (PL2303HXN not implemented yet)
FTDI FT232
CP210x
CH341, CH341 (“fake”)
CdcAcm: Original Arduino Uno, Adafruit Feather_M0 and CLUE, Micro:bit, Teensy, OpenCR

The following has been changed in the access methods:

Remove “serial” in method names.

Add set and get of Parity(), Rts() and Dtr() (Dtr used for Arduino reset)

The following functions gives the ability to read and write any byte 0..255 on the serial line
ReadByte(), WriteByte()

Read and write hex coded string 0..9, A..F on serial line. Each byte on the serial line is coded as 2 hex characters.
ReadHex(), WriteHex()

The following function adds the ability to read text messages separated with new_line char.
ReadLn() WriteLn()

Read and write a list as bytes on serial line.
ReadBytes(), WriteBytes()

Test number of bytes in read buffer
Available()

To empty read buffer
Flush()

Return driver name to identify the USB-Serial adapter.
DriverName()

Experimental, may be removed in the future.
Upload(), upload a hex file to Arduino.

I now make com.SerialOTG.aix in a release version.

I have included two test programs as a demo on how to use it.

SerialOTG.aia  led.ino works as a terminal program and to set and reset a led. An echo function returns all bytes so you can test the different communication modes. This can also be tested by connecting read-data to write-data on the adapter as an echo function.

ArduinoTime.aia and Time.ino shows how to use the text message communication.