

Portable applications for  
**One Laptop Per Child**

What is the **One Laptop  
Per Child** project?















**XO Laptop** comes with  
its own innovations

A light, low power consumption  
machine ergonomically  
suited to children



# Dual display mode operating under direct sun light



# Color mode



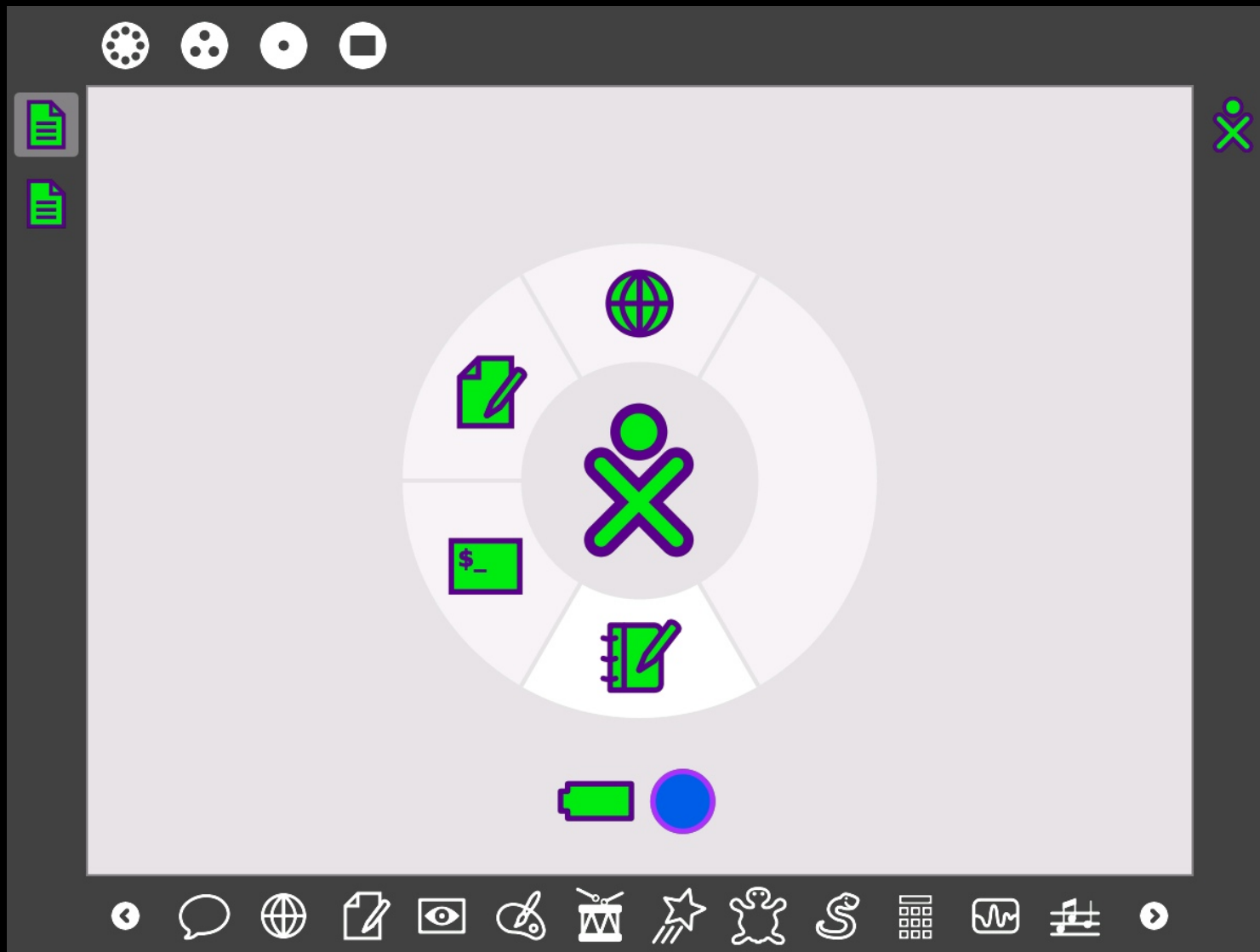
B&W mode at 200 dpi



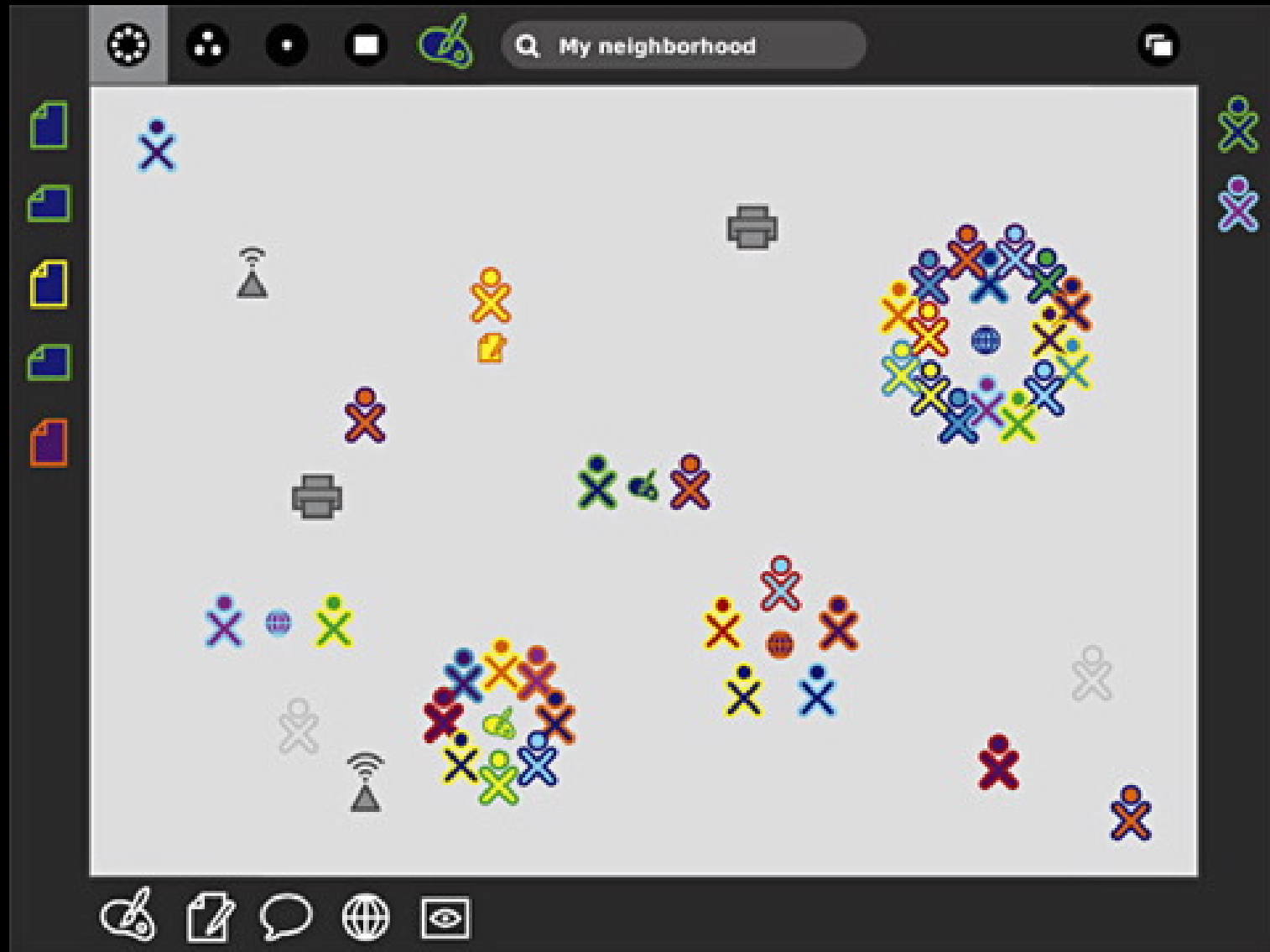
# Ebook reader mode



# SUGAR, the user interface paradigm for OLPC



# Sharing over the mesh network





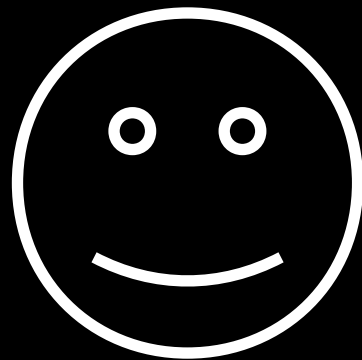
Why free software for  
education?

**OLPC** proposes Python and  
Smalltalk to develop software

The Smalltalk developer  
platform in **OLPC XO**

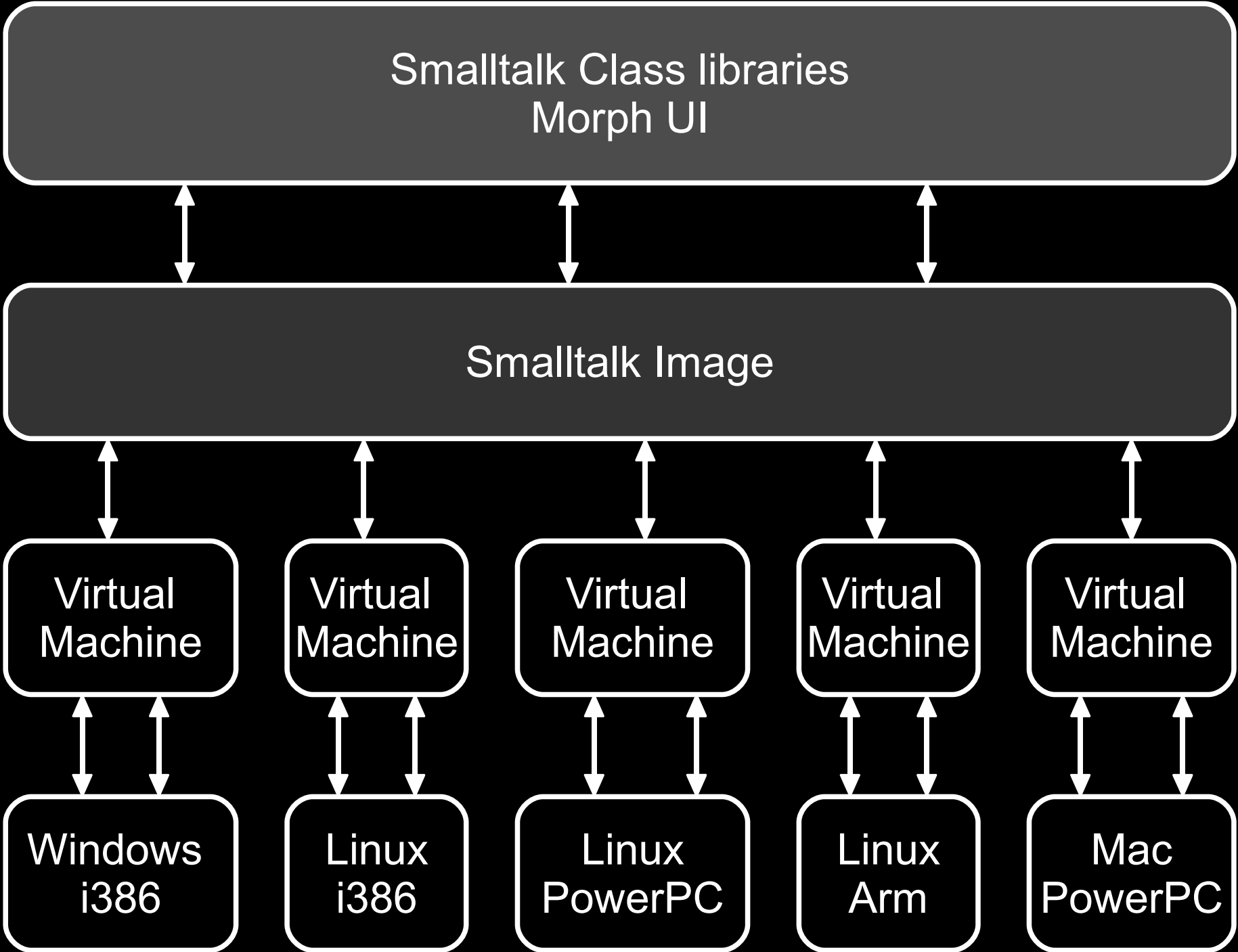
When writing free software,  
you want portability

You want to maximize  
your user base,  
so you can be more famous



Smalltalk – Etoys  
is extremely portable

Why so?





Smalltalk Class libraries  
Morph UI



Smalltalk Image

Virtual Machine    Virtual Machine    Virtual Machine    Virtual Machine    Virtual Machine



Windows  
i386

Linux  
i386

Linux  
PowerPC

Linux  
Arm

Mac  
PowerPC

Smalltalk Class libraries  
Morph UI

Smalltalk Image

Virtual  
Machine

Virtual  
Machine

Virtual  
Machine

Virtual  
Machine

Virtual  
Machine

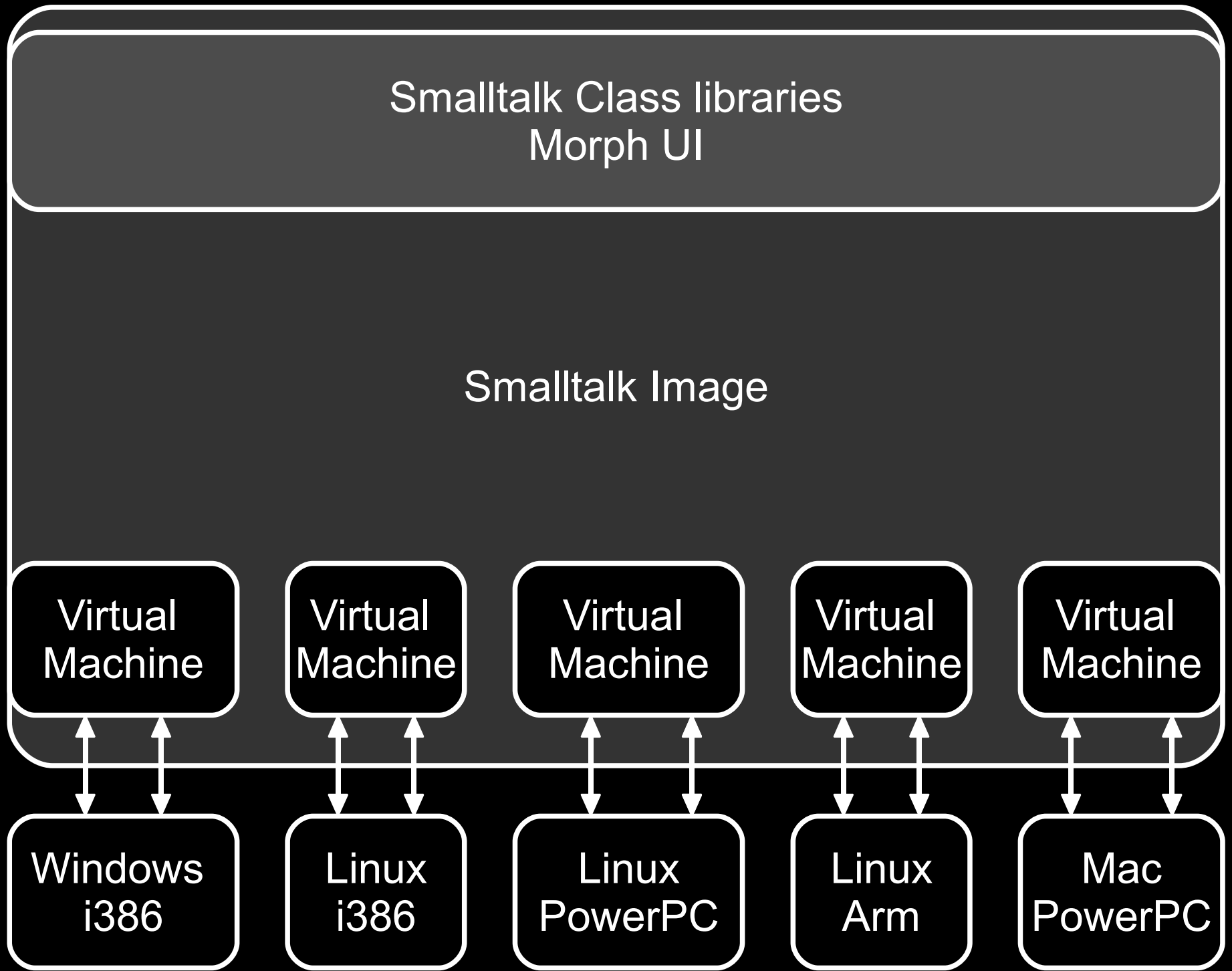
Windows  
i386

Linux  
i386

Linux  
PowerPC

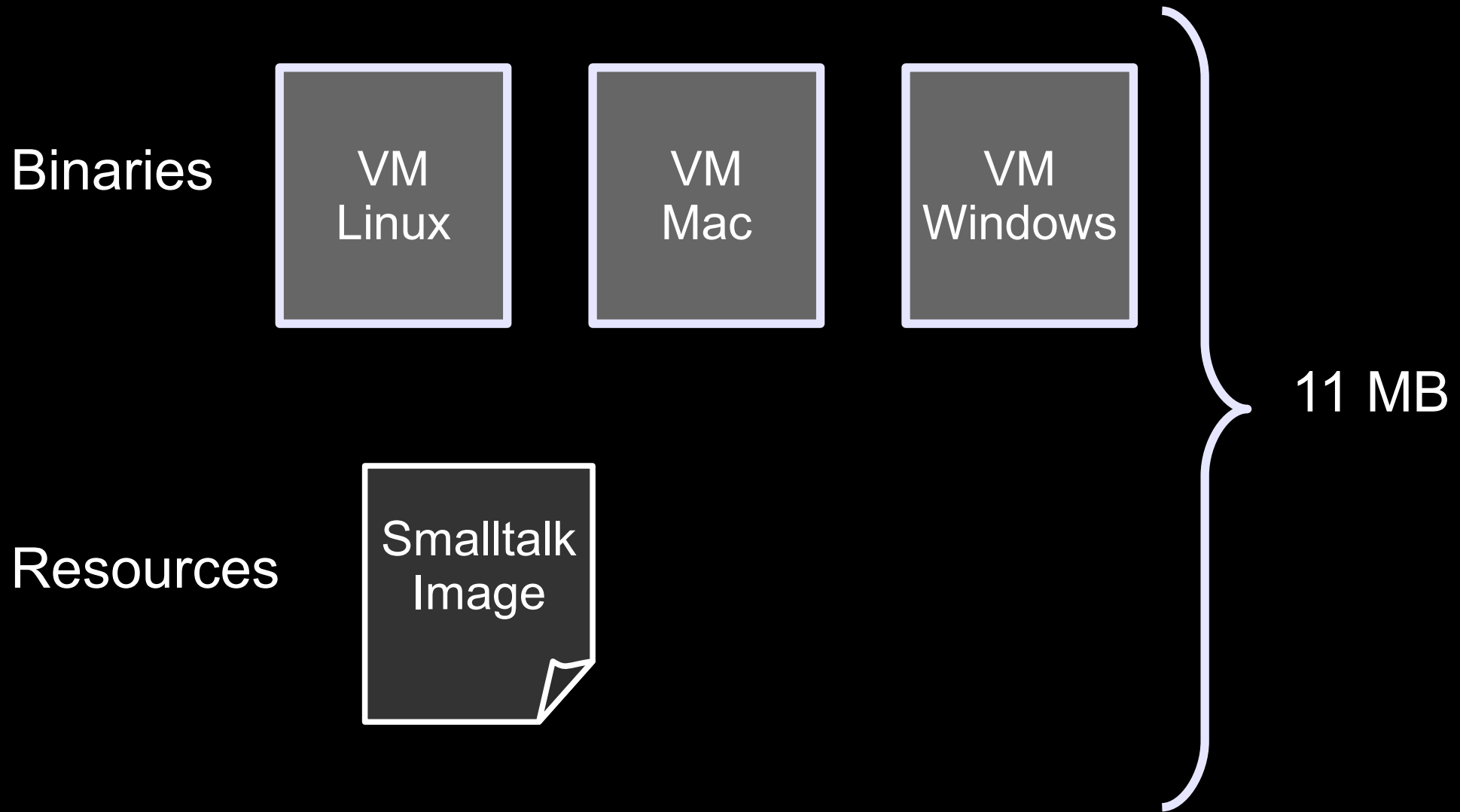
Linux  
Arm

Mac  
PowerPC



**One-click distribution**  
for Smalltalk application

# One-click distribution architecture



# XO bundle distribution architecture

A folder architecture with an XML description file

ship it with Smalltalk image segment

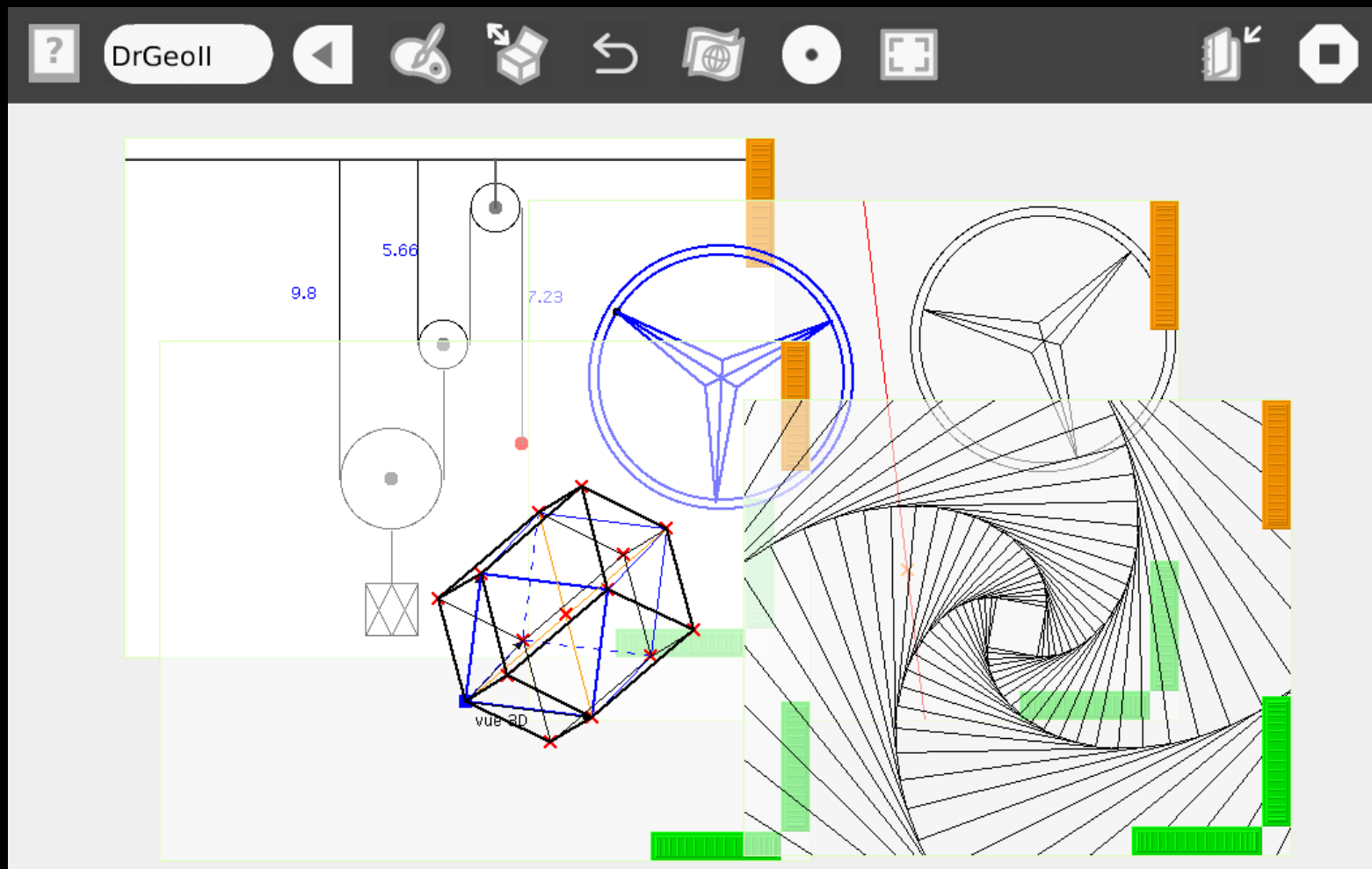
or with Smalltalk image

virtual machine already in the XO laptop

A one-click distribution example...

# Dr. Geo II

interactive geometry framework  
for Etoys



# The future of Smalltalk opensource

Pharo : <http://pharo-project.org>



Better for the better  
Beauty to learn from  
Not backward compatible  
Clean, lean and fast



**OLPC** <http://wiki.laptop.org>

**Etoys** <http://www.squeakland.org>

**Dr. Geo II** <http://wiki.laptop.org/go/DrGeo>

**Pharo** <http://pharo-project.org>