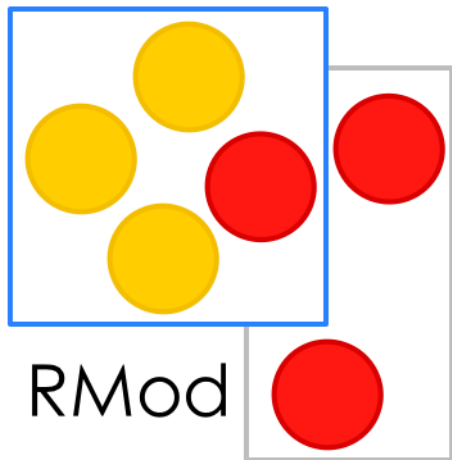


Modern Event Touch and Gestures for Pharo



Merwan Ouddane
University Lille 1
RMod Team
ESUG 2015

Where are touch devices present ?

- Library
- Meeting room
- Museum
- Schools



What do we need ?

- Receive touch events
- Recognize a gesture from a sequence of events

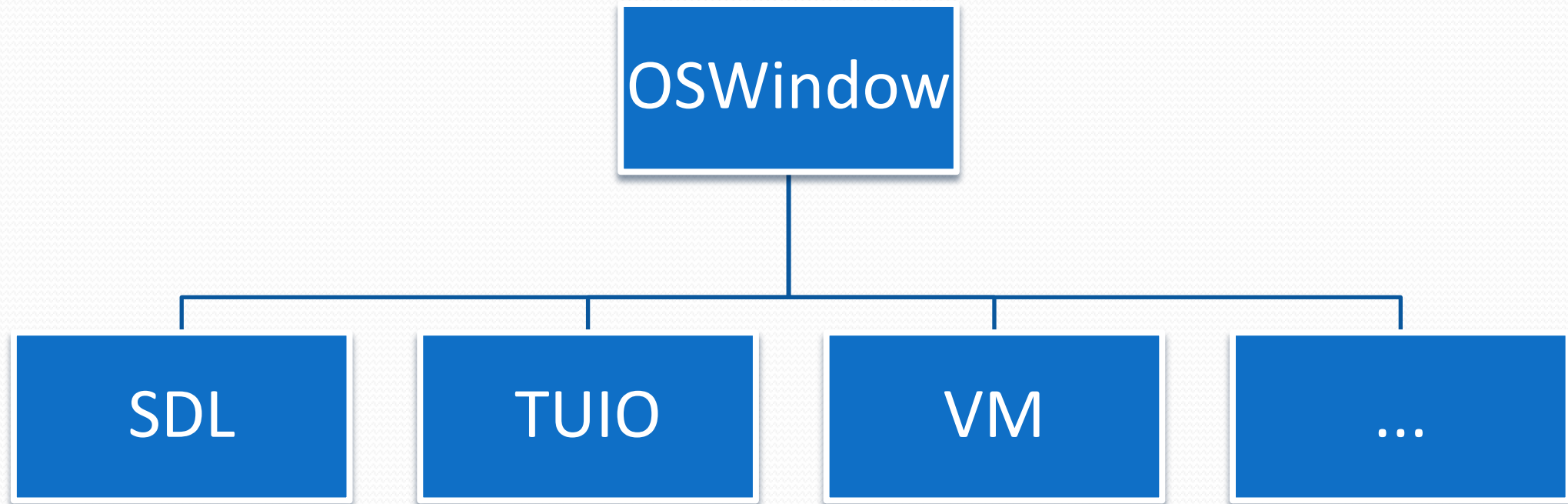
Pharo's windowing system before

- Event are generated by the VM
- It's old...
- Incosmplete (Mouse, Keyboard, Complex)

OSWindow

- API created to handle system window + their events
- At image side instead of VM side
- Cross-platform

OSWindow



SDL

Syberia II, game made with SDL

- <https://www.libsdl.org/>
- Development library
- Cross-platform
- Allows a low level access to hardware
- Large list of events

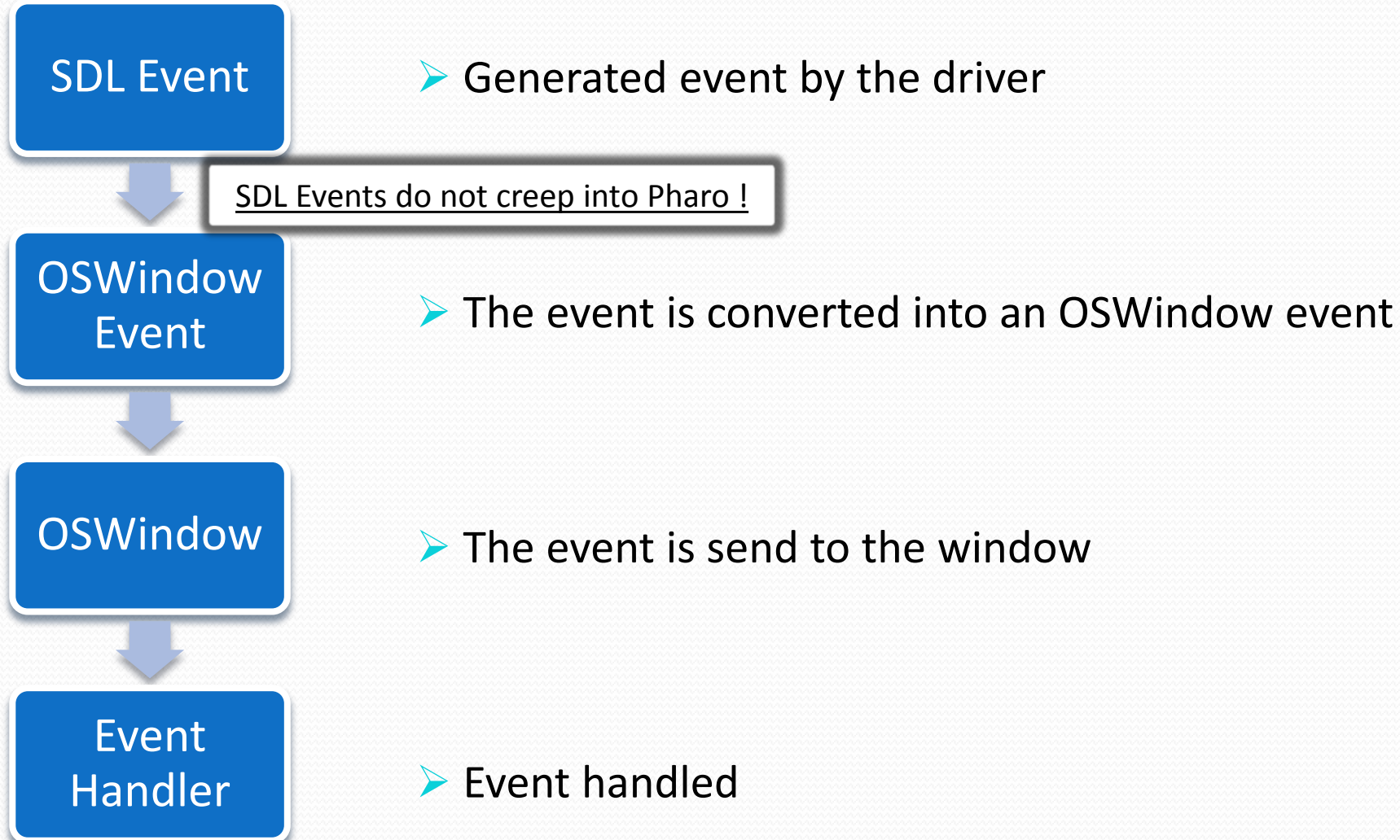


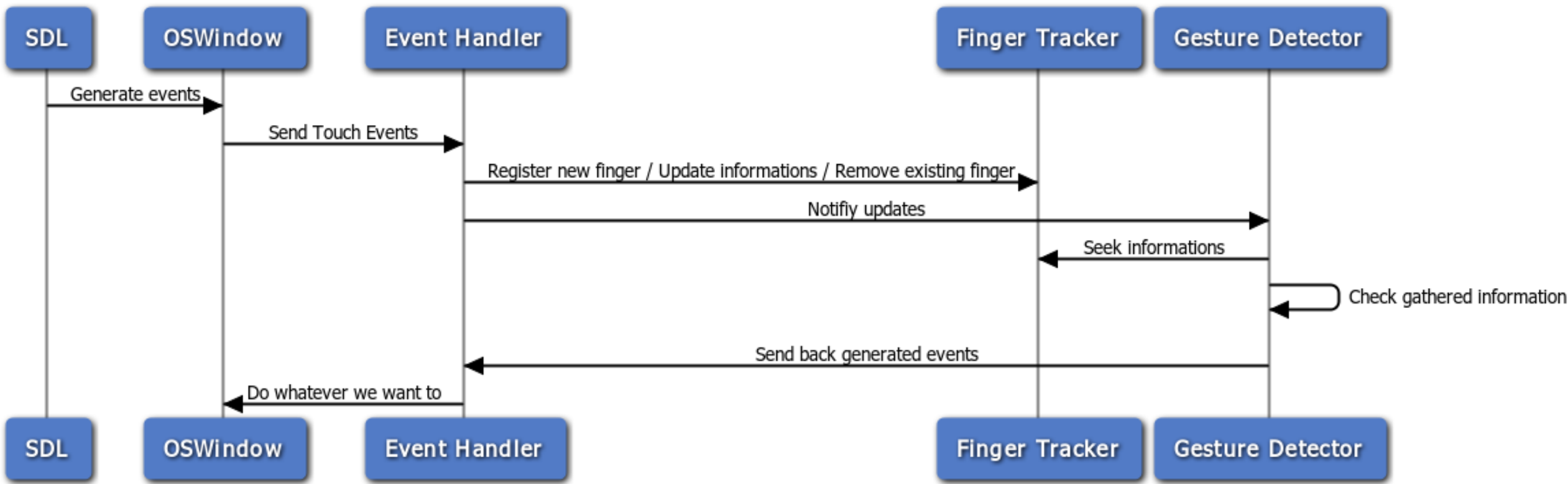
Existing gestures

- Scroll
- Rotation
- Pinch
- Swipe
- Hold
- Double tap

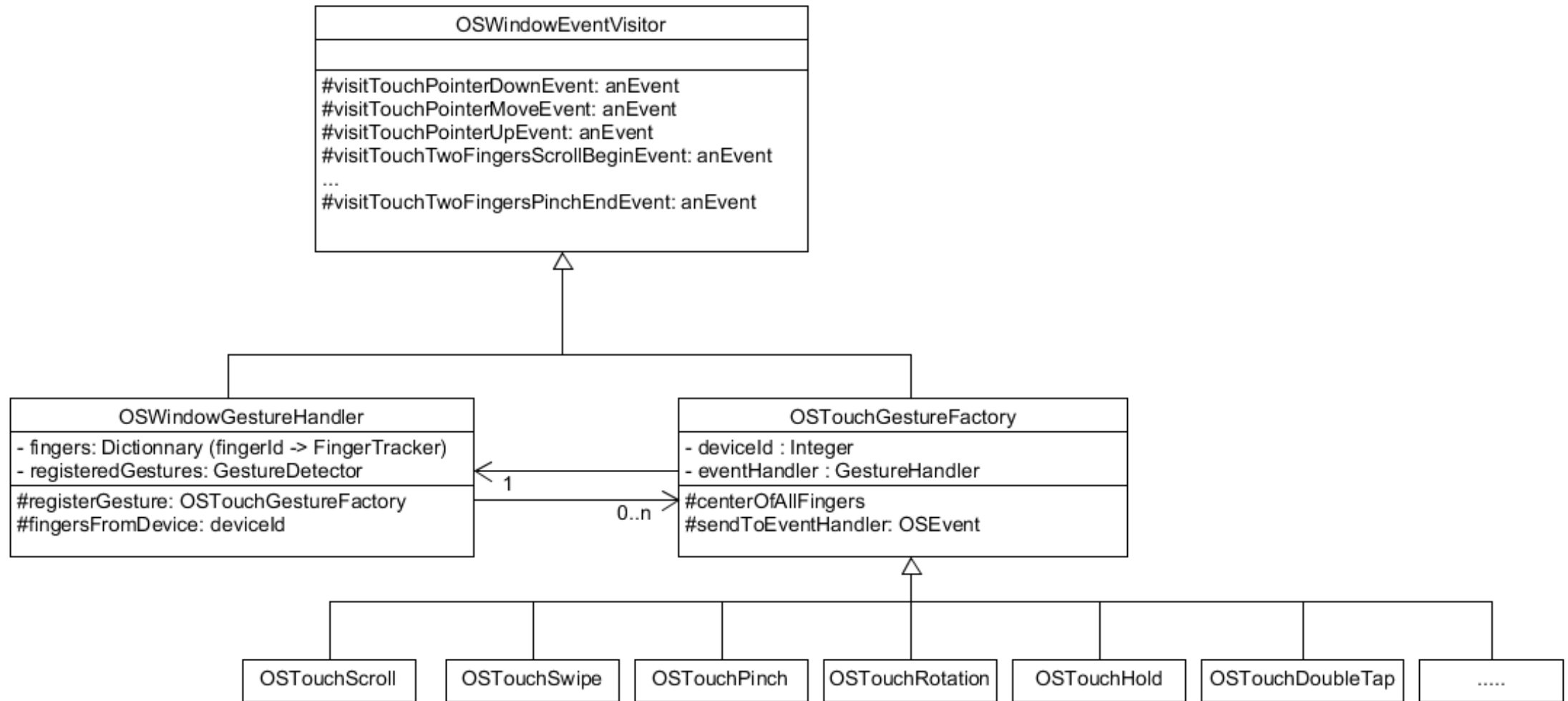
Demo time !

Event path





Interactions between handler and gesture detector





Create and compose gestures

Where can it used ?

- Interactive table like the TUIO table
 - Infra-red table, sending events by web socket
- Phones, tablets, computers with touch screen
- Computers with touchpad

Where it has been used ?



3D modelisation with Woden

Where it has been used ?



How to play ?

Everything will be on CI (as soon as I can) :

<https://ci.inria.fr/gestures>



Thanks to Thales for the sponsor
For any information: merwan.ouddane@inria.fr
Videos on Pharo Project's youtube account !