



# **Next step: Two project ideas**

***Newton never dies. It just gets new hardware.***

Paul Guyot

Worldwide Newton Conference 2006



# Two project ideas

## Idea #1

 Design a new synchronization app

## Idea #2

 Modernize the development tools

 Einstein Platform requires those two apps.



# Synchronization



# Current state


## **NCU**

 **Buggy. Windows and MacOS 7.5-9 only.**

 **Old applications.**

## **NewtSync**

 **Works more or less.**

 **At some point was flawed by its text-based Newton<->Desktop interface.**



# Current state

- 💡 **Escale and the DCL**
  - 💡 **Just not finished.**
  - 💡 **Implementation of the Newton's native Dock protocol.**
  - 💡 **Implementation of most of the Newton's object system.**
  - 💡 **<http://sourceforge.net/projects/escal>**
  - 💡 **<http://sourceforge.net/projects/newton-dcl>**



# Development Tools



# Quick overview

- 💡 **Interfaces have to be designed with NewtonScript objects.**
- 💡 **Some code can be written in other languages.**
- 💡 **Lower-level programs (such as Blunt, ATA Support, 802.11b) are less relevant for the Einstein platform.**



# Current state

 **NewtonScript programming**

 **Newton Toolkit (NTK)**

 **Windows and MacOS 7.5-9**

 **Classic is dead.**

 **NewtDevEnv**

 **Native tools**

 **Not as intuitive as NTK.**





# Current state

 **Native-code development tools**

 **Newton C++ Tools**

 **Based on MPW (Macintosh Programmer's Workshop): Classic only.**

 **Eckhart developed a gcc toolchain**

 **Incompatible for C++ code.**



# Current State

 **Some other languages:**



 **Waba might be renewed for Einstein Platform (merged with the host JVM). It may also be used for interfaces.**

 **NewtBASIC never really produced Newton-style apps.**

 **LittleLisp neither.**





# Current state

-  **ATA Support and Einstein REX are compiled with toolserver(1), a big hack that works for Eckhart, Simon and I and requires Classic.**
-  **Complex to install and not very stable: we often change the code to deal with bugs in the Norcroft compilers.**



# Hints

-  **Plenty of NewtonScript interpreter projects: Simon Bell's, Makoto Nukui's, Gnuton, etc.**
-  **Several package generators implementations: Makoto Nukui's, DCL's, etc.**



# **NewtonToolkit prototype**



**Uses NEWT/0 by Makoto Nukui**



**<http://www.so-kukan.com/gnue/>**



**Native and Cocoa bindings.**



**An application entirely written in  
NewtonScript. Any NewtonScript  
developer can work on it.**



**Built with Xcode.**