

# NAO SDK

TAKE CONTROL OF NAO  
AND BRING HIM TO LIFE

NAO SDK PROVIDES YOU WITH A FULL SET OF TOOLS FOR POWERFUL NAO PROGRAMING AND CUSTOMIZATION.

## KEY BENEFITS

- » Powerful programming capacities, with low level and high level APIs
- » Deep behaviors adaptation with real time access to sensors and actuators
- » Robot personalization by embedding your own autonomous behaviors



## SOFTWARE DEVELOPMENT KIT DEVELOPER TOOL

NAO SDK ENABLES DEVELOPERS AND RESEARCHERS TO LEAD SPECIFIC PROJECTS REQUIRING HIGH ROBOT PLATFORM CUSTOMIZATION.

Our SDK allows you to embed modules into your robot and use them to create elaborated behaviors. The SDK comes with the compilation and debugging tools you need. Our SDK is compatible with many robotics development platforms and languages.

## SDK KEY FEATURES

### API FOR ROBOT CONTROL

- » Motion: walk, cartesian control, fall manager...
- » Audio: text to speech, speech recognition, localization, ...
- » Vision: vision recognition, face detection, landmark detection...
- » Sensors: inertial board, sonars...
- » Core: behavior manager, resource manager, memory...

### PROGRAMMING LANGUAGES

- » Supported on the robot (for embedded control): C++, Python.
- » Supported on computer (for remote control): C++, Python, Java, Matlab, .NET, Urbi

## INCLUDED IN SDK

### » **NAOqi SDK**

Easy to use classes and methods that allow developers to create new behaviors in many languages (C++, Python, Java, .NET...). It includes APIs for main features such as motion, vision...

### » **qiBuild**

Easy C++ configuration and cross-compilation with Aldebaran's cross-platform build tools. Work with most popular development environments.

### » **Documentation**

Up-to-date guide on NAO, software, programming and references.

### » **Code samples**

Samples covering NAO's main features (motion, vision, audio...).

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## SDK REQUIREMENTS

OS	Windows 7 / XP, Mac OS X Snow Leopard / Lion and Linux Ubuntu - Lucid to Natty		
SYSTEM	1.5 GHz CPU / 512 MB RAM / 200 MB free disk space / certified OpenGL graphics card		
NETWORK	Wifi access point		
ROBOT COMPATIBILITY	Models: H25, H21, T14 or T2. Versions 3.2, 3.3 or Next Generation		
LANGUAGES	VERSION	COMPILER & IDE	TOOLS
C++	Standard	For Windows: Visual studio 2008/2010 For Mac: Xcode, QtCreator, Eclipse For Linux: gcc 4.4+, QtCreator, Eclipse	Cmake 2.8.3+ Python 2.7+
PYTHON	For Windows: Python 2.7 -32bits For Mac / Linux: Python 2.6+	n/a	Text editor
JAVA	For Windows: Latest Java SDK For Linux: Java SDK 1.6.0-22+	n/a	Swig
.NET	For Windows: .Net4 or .Net2	For Windows: Visual Studio 2010 (if .Net4) Visual Studio 2005 / 2008 (if .Net2)	n/a
URBI	Urbi SDK 2.0+	For Windows: vcxx2005 or vcxx2008 For Mac or Linux: gcc4	Autoconf 2.63+, Automake 1.11.1+ bc, Boost 1.38+, Cvs Flex 2.5.35+, G++ 4.0+, Git 1.6+ Gettext 1.17, GNU sha1sum Help2man, PDFLaTeX, Python, socat, Texinfo, Transfig,yaml for Python

