

Comparison of Pepper's OS versions - FAQ

Subcategory	Question	Popularity	Answer
Compatibility	Is there a wrapper that is supported which converts my python code in 2.5 to 2.9 in Android?	1.High	Sorry, there is no such a tool that converts the python code in Android but the good news is that you do not have to be an android expert to develop an application on pepper 2.9!
Compatibility	Can 2.9 support the old SDKs (C++, Python) developed by SoftBank?	2.Medium	Python and a C++ SDK are only available for 2.5.
Developing	Do I need to be an android expert to be able to develop applications on 2.9?	1.High	You do not have to be an android expert to run the applications but you need to understand "Android lifecycle" in order to use " Robot lifecycle " for pepper QiSDK. If you are an android developer, you don't need to have specific knowledge in robotics to program on pepper. Please check Dev C blog for tips and tricks !
Developing	Will there be upgrades to Choregraphe?	1.High	Choregraphe is used for Pepper (NAOqi 2.1, 2.5) et NAO6 (NAOqi 2.8). New features are not planned (except security patches) since latest efforts have been focused on Pepper QiSDK (2.9) You can follow up releases on this web site .
Developing	Is there a public portal where I can post questions related to robot application development?	1.High	The Support page is intended for customers facing issues with their robots or desiring to learn more about the use of robots: Getting Started (unboxing, robot settings...), User Guide (daily use, interaction...), Troubleshooting for Pepper & NAO, etc. Contact Pepper Support or Contact NAO Support
Developing	Will there be any basic channel planned for 2.9?	1.High	The Basic Channel is not available in NAOqi 2.9 as there is no autonomous life in the idle state anymore. However, we made the different collaborative dialogs available to be easily integrated into your android applications if you desire to.
Developing	Can I create better artificial intelligence projects in 2.9 than it was in 2.5?	2.Medium	As a humanoid robot, Pepper is programmed to talk and move like humans and mimic their actions. Therefore features such as chatbots, navigation or even face recognition are close to Artificial Intelligence. Chatbots are an important application for Artificial Intelligence-like features. The QiSDK in pepper 2.9 includes some new APIs especially aimed at integrating and combining libraries such as the following : - [Integrating a chatbot with DialogFlox](https://developer.softbankrobotics.com/pepper-qisdk/lessons/integrating-chatbot-dialogflow) - [Map Localize and Move](https://developer.softbankrobotics.com/blog/maplocalizeandmove) - [Pepper Face Mask Detection](https://developer.softbankrobotics.com/blog/pepper-face-mask-detection)
Developing	Can I have a timeline in android like I used to have in Chorégraphie?	2.Medium	Timeline in Choregraphe enables you to easily synchronize boxes with movements. With Pepper QiSDK, the special tool Animation Editor enables you to create personalized moments by assigning different values to the Actuators of the robot (head, arms and leg) along a Timeline. Although the QiSDK timeline does not include code (as it does in Choregraphe) you can still link these personalized movements to external events such as sound and speech with Labels. You can also check this lesson about Basics of animation creation .
Developing	Are the 2.5 APIs and/or libraries further developed (e.g. localization and mapping)?	2.Medium	There are numerous APIs and libraries in 2.5 and its possible to tweak and develop with them (e.g. for advanced development, it is possible to get sensor data in 2.5 and to fine tweak localization and mapping). Therefore no further APIs and libraries developments are needed.
Developing	Is there a way to benefit from the advancement without upgrading from 2.5 to 2.9?	2.Medium	Nope, but you can try the android studio plug-in on a virtual robot. Robot Viewer gathers several features on an emulated robot on the Android plugin: 3D view of the robot, controlling the movements of the robot, watching dialog outputs and entering dialog inputs, watching the logs.
Developing	The new navigation and Face Recognition application on pepper is in 2.9 or 2.5? (If it is in 2.9, it is possible to have it in 2.5 and how?)	2.Medium	In 2.5 ALNavigation API allows the user to perform safe displacements when using the robot. You can also use Face detection and tracking . Tutorials would help to get face characteristics such as age and expression. In the other hand, there are robust Motion APIs with 2.9. You can find tutorials aiming to master Frames, GoTo and ExplorationMap. And you can still find all the public SBRE projects on Gitlab, including Map Localize and Move , Pepper Gamepad or Aruko Markers and Pepper Face Mask detection .
Marketing	Why is the upgrade from 2.5 to 2.9 paid if the IDE and plugin on Android studio are free of cost?	2.Medium	Upgrade from 2.5 to 2.9 is a service that needs expertise and includes potential transportation if the upgrade fails. Therefore, this service is provided by the Softbank Robotics Customer Care, comes with a cost.
Security	What are the differences in the security aspects between version 2.5 and 2.9?	1.High	The 2.9 NAOqi version has been built mainly to improve the security of our robots, with the suppression of old APIs and the Android layer on top of NAOqi. Our roadmap includes improvements with a new hardware architecture to benefit from newer improvements, including newer Android versions. We advise our partners to develop applications with security in mind, to secure the wifi the robot is connected to, and to ensure default passwords are changed.