



Microsoft loves Linux, Linux runs Windows

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Microsoft will ship a full Linux kernel in Windows 10

Reading [this article on The Verge](#), it seems that at the end Windows will be able to run also a Linux kernel in order to being able to run opensource application compiled for GNU/Linux?

*Microsoft has surprised many in the Linux developer community in recent years. Surprises have included bringing things like the **Bash shell to Windows**, or **native OpenSSH in Windows 10**, and even including Ubuntu, SUSE Linux, and Fedora in the Windows Store. Microsoft is now going even further, with plans to ship a full Linux kernel directly in Windows 10.*

Possibly because Microsoft shown us that it would be feasible to sell problems instead of solutions. However, on the long run another scenario is much more probable. Running Linux applications included android ones, is the first step to run on Linux emulation.

Since the beginning, Windows did not run on bare metal but on MS-DOS and it was running thanks to BIOS hardware support. Under this PoV the PC architecture is like a lasagna in which many layers trying to cooperate. Quite a nightmare about efficiency, security and driver development.

Unfortunately, IBM-PC and laptops are so spread around that it is quite difficult to imagine to not support this architecture. Until, android phones and tablets based on RISC arch got into mainstream.

Marketing is another story

Running Windows on an embedded GNU/LINUX emulator will stop Microsoft of thriving with drivers and security and let them focusing on applications.

That's the point: once my device runs Linux, it could run natively any application that has been developed for it. So, why do we need run Windows anymore? Microsoft applications like Office 365. Pass through.

Pass through instead of hand over

There is too much advantages in running Windows as emulated OS on an embedded GNU/Linux that it is difficult to think that Microsoft would not adopt this approach.

Unfortunately, marketing is another story. Windows users SHOULD think that it is Windows that runs Linux and not viceversa. This is the reason for this approach that looks quite absurd by a mere technical point of view.

Microsoft needs to keep its user-base and application developers stick to its selling network. Otherwise, it would be a hand over in favour of GNU/Linux instead of a passing through.

MICROSOFT ♥ LINUX

GNU/Linux emulates Windows, since decades ago. We are happy to hear that they are loving GNU/Linux too, but hands off from our own hardware! 😎

Psst, we will be your hardware soon! 😊

Windows as sandwich, guideline

There is a good chance that it would be a "Windows as sandwich" story in which Linux will play the role of bread slices and Windows the ham. Windows will bring value to the

sandwich and Microsoft will suck that value off the market. After all, Microsoft was always oriented toward making money as any common private company.

So far said, let me explain a little in deeper the main idea.

IMHO, the following will be the guideline of next generation of Windows development because there is no any reason to spend a lot of money to maintain a lot of hardware drivers to sell a commodity like an OS.

Mainboards should come with a HW emulator and I am not convinced that Linux would have been the best choice. Again, it was marketing to choose Linux.

While a BSD embedded system would have much better fitted in the plot (or any other small footprint embedded system as Apple did but they had the advantage to fully controlling the value chain from hardware to stores which means no fragmentation). Unfortunately, Linux is popular and well spread so the kernel/driver developers.

OS as commodity, the design

Finally, the embedded Linux would be divided in few main parts:

1. kernel/hardware drivers (from the hardware manufacture/assemblers/distributors);
2. the system itself for the emulation with the emulation and related API (Application Program Interface);
3. the network pass through with filtering (firewall), intrusion detection, basic cryptographic management and obviously user-id/licence manager.

In few word: hw manager (kernel+driver), emulation manager, security manager. The three big issues at once.

Power management is included into hw and system management. Each will take care of the respective duties.

A standard model with a standard development environment will be given to hw dealers in such a way they would have just the need to developing their own hardware customisations and getting everything else done. The same will inherit the emulated Windows which will be freed by the HW architecture (RISC, CISC, whatever, etc.)

Google did and they are doing

Google did and they are doing that for mobiles and tablets for the mass market

Google is doing/has done such system architecture starting from Android Oreo and with an experimental approach which at the time were named Fuchsia.

Starting from Android Oreo, manufactures customisation will be related just to hardware support (hw manufacturers) and GUI / custom apps (devices dealers) while everything else will be on the shoulder of Google which will be able to defeat the Android fragmentation.

Google Oreo is an example in the mass market. While MacOSX with BSD kernel was a in-house successful attempt.

Microsoft is slowly and confusely doing what others just successfully did.

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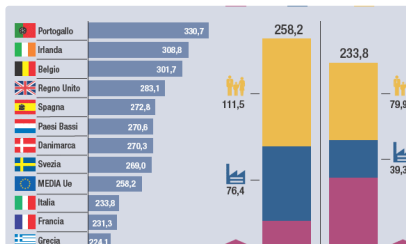
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