

Independent and freely available smartphone operating system for Europe

International joint project brings Oniro OS to German smartphone from Volla

Reimscheid, 21.05.2024 - The renowned Eclipse Foundation is developing an open source multi-kernel operating system, **Oniro OS**. The project is supported by established industry brands such as Huawei, Linaro, Software Mansion, Array, Futurewei, Typefox, NOI Techpark. The system's state-of-the-art scalable architecture can be used for all device classes, from IoT, smartwatches and smartphones to tablets and smart TVs. Together with Volla Systeme, the foundation is porting the alternative operating system to the latest and most powerful model, the Volla Phone X23.

International cooperation

This project is the result of an international collaboration in which established industry companies such as Huawei, Linaro, Software Mansion, Array, Futurewei, Typefox and NOI Techpark play an important role. This partnership makes it possible to pool the expertise and resources of the companies involved to create an alternative operating system that is both innovative and secure. Volla Systeme is contributing its experience in porting operating systems to various smartphone models to the project.

As a young and ambitious German smartphone brand, Volla relies on an intelligent operating concept and maximum cyber security thanks to its own operating system Volla OS, which is based on the Android open source project. Alternatively, Volla phones are also available with the mobile version of the popular Linux distribution Ubuntu. Volla Systeme can thus contribute its experience in porting operating systems to four smartphone models to the project.

Mobile mainline kernel Linux

The special thing about Oniro OS on the Volla Phone X23 is that it is based on a so-called mainline Linux kernel. Few people know that Android is also a Linux operating system. However, the kernel, the core of the operating system, has been modified and differs from the standard Linux that can be found on laptops and servers in data centers. Chipset manufacturers for smartphones such as Qualcomm or Mediatek develop corresponding device drivers that cannot be used directly by a mainline Linux kernel.

For smartphone manufacturers, this means that an operating system has to be adapted to each smartphone model with great effort. Independent operating systems also always require a minimal Android system so that the hardware can be used to its full extent. Volla Phones for Ubuntu Touch, for example, use the software of the Halium project, which enables an operating system to be connected to the respective hardware.

Open source device drivers that a mainline Linux kernel can use would have the advantage that not only would porting an operating system to a smartphone model be much more efficient, but they would also be transparent and verifiable for a developer community. An independent, open-source and standardized operating system at all levels accelerates innovation and increases cyber security. With a strong partner like Huawei, it may also be possible to motivate chipset manufacturers and board designers, the architects of smartphone hardware, to follow this path.

Special features for the European market

Huawei is one of the world's largest manufacturers of telecommunications products, from smartphones to mobile infrastructure. From the proprietary operating system Harmony OS for the Chinese market, the company branched off into the open source version Open Harmony. Oniro OS was developed from this for the European market. In addition to the guarantee of a full open source license, the operating system contains a number of additional software components such as Rust and React Native. In both cases, these are modern programming languages that have gained in importance. In addition to the GPL license for the Linux kernel, the other parts of Oniro are under the liberal Apache license.

Even if it will be a long way to a fully comprehensive alternative for consumers, Oniro has great potential for industrial solutions. Volla System is already using the mobile Linux distribution Ubuntu Touch for industrial solutions such as a mobile POS system or a wheelchair control system. Together with the comparatively inexpensive standard hardware of smartphones, the Linux basis offers a perfect combination for fast implementation and high cost-effectiveness. Ultimately, users will also benefit. Oniro OS has the advantage that it is suitable for all device classes, from smartwatches to smart TVs or car entertainment systems.

Prototypical use on the Volla Phone X23

As a first step, the Eclipse Foundation is working with the partners in the project on a basic port of Oniro OS on the Volla Phone X23, which is characterized by a particularly powerful G99 gaming processor from Mediatek and large RAM and internal memory. The robust design with a shock and water-resistant housing makes the device ideally suited for industrial and commercial applications.

Open source strategy from Volla Systeme

Volla Systeme pursues a consistent open source strategy and cooperates closely with the UBports Foundation to support official alternative operating systems such as Ubuntu Touch on Volla smartphones. This partnership not only promotes the diversity of operating systems on Volla devices, but also strengthens the open source community by providing a platform for collaborative development and innovation. In addition to supporting Ubuntu Touch, the upcoming Volla tablet, which is currently being crowdfunded, will also benefit from this strategy by combining convenience and privacy for users.

In addition, Volla systems also support community ports of Sailfish OS and Droidian. This support enables independent developers to implement their initiatives on Volla devices and contributes to the diversity and flexibility of the Volla ecosystem. For more information on Volla Systeme's open source initiatives and philosophy, please visit the official Volla website: volla.online

→ More photos and images of the cooperation can be found here: [Volla Systeme and Oniro](#)

→ Crowdfunding for the Volla Tablet : [Volla Tablet - Simplify your digital life](#)

Contact us

Dr. Jörg Wurzer

+49 2191 59897 60

presse@volla.systems