New release
ARM V1.0.0 for Raspberry PI 4B

ARCA Trusted OS for ARM v1.0.0 is the latest version of CYSEC Container-specific Operating System running on ARM architecture designed to be executed on Raspberry Pi 4B boards. This version of ARCA Trusted OS is the first production-ready version of CYSEC's hardened Linux operating system for ARM architectures. The present version can only be deployed on Raspberry Pi 4B.
There are plans to extend the number of boards where ARCA Trusted OS for ARM can be deployed.

How does ARCA Trusted OS for ARM fit into CYSEC vision?

CYSEC aims at providing a transparent, homogenous and secure software infrastructure to host and orchestrate containerized applications within distributed architectures. CYSEC's main product, ARCA Trusted OS on x86, is a hardened Linux-based Operating System designed to run on x86 architectures. This Linux micro-distribution is built to only run containers orchestrated by Kubernetes. ARCA Trusted OS on x86 can be deployed on various servers or in VMs executed in clouds.
With the ARCA Trusted OS for ARM, CYSEC makes its Operating System compatible with small boards that can be deployed in the edge. Cysec's long term vision for ARCA Trusted OS for ARM is to make it compatible with Kubernetes so that small devices in the edge such as edge gateways can be connected to a Kubernetes cluster easily.

What is the ARCA Trusted OS for ARM?

ARCA Trusted OS for ARM is a secure operating system to execute containerized applications running on ARM architecture-based processing units. ARCA Trusted OS for ARM is composed of a Linux micro distribution and a Docker runtime platform.
A simple but automatized management architecture allows end-users to manage a fleet of Raspberry Pi 4B boards. This fleet management approach relies on Ansible scripts for the automation and Wiregard VPN for security.

What are the main security features of ARCA Trusted OS for ARM?

ARCA Trusted OS for ARM is a Linux distribution for containerized applications that is designed to protect the data it hosts from attackers having unauthorized physical access to the board on which ARCA Trusted OS is installed.
The main security features of ARCA Trusted OS are listed below:

- ARCA Trusted OS is a minimalist OS including only what is needed to run containers. This approach reduces its attack surface.
- ARCA Trusted OS is immutable to prevent unauthorized file system modifications.
- ARCA Trusted OS includes a secure boot to verify the OS authenticity and integrity at each boot.
- ARCA Trusted OS image is signed with a secret key that is associated with a single end-user. This prevents CYSEC's customers from facing vendors lock-in with the ARCA Trusted OS.
- ARCA trusted OS integrates a by-default full disk encryption to protect data at rest. This encryption mechanism comes with a mechanism of protection and release of the encryption key based on TPM2.0 (supported hat: STPM4RasPI) or OTP.
- CYSEC maintains ARCA Trusted OS security up-to-date by monitoring the CVEs and security patches that impact ARCA Trusted OS for ARM and providing regular releases- including the latest security patches and improved security features.

Learn more at www.cysec.com/arca