Virtualized systems are revolutionizing the way secure systems are being built, but the cost of developing software to rigorous standards can be stifling to innovation.

DornerWorks Virtuosity® OA (Open Architecture) makes it possible to integrate different software architectures, and develop robust virtualized systems cost effectively. Certified to The Open Group FACE™ Technical Standard for mission critical systems, Virtuosity OA provides the open source virtualization technology now supporting next generation open architecture projects.

Virtuosity OA is a Xen-based distribution from DornerWorks that you can use to set up and run a virtualized system on your own embedded hardware. Even better, Virtuosity is an open source technology, which means you get to own the software you are working with.

Bring cyber-resilient innovation to your project

DornerWorks has been guiding projects based on virtualization technology for years, and developed Virtuosity OA as the first open source FACE Technical Standard compliant OSS in the world.

Virtuosity OA currently enables distributed development systems being used in cutting edge virtualized projects. The Virtuosity hypervisor is a perfect fit for MPSoC-based products, enabling management of multiple processor cores, assisted by built-in hardware virtualization capabilities.

Virtualization with the future in mind

What does safe and secure virtualization look like? In your system, Virtuosity OA will provide:

- **Strict ARINC 653 partitioning**, with privileged partitions for initialization and configuration, health monitoring, and I/O control
- **Facilitates integration** of your applications
- **Support for controlled I/O sharing** with RS-232/422/485, MIL-STD-1553, Ethernet, ARINC 664p7, CAN, and more
- **Alignment with open industry standards** including ARINC 653, POSIX, and FACE TS
- ** Availability for x86 and ARM targets**
When size, weight, and power (SWaP) are issues in your design, Virtuosity OA provides a unique path to meeting these goals. By consolidating hardware resources on a common computing platform, Virtuosity OA reduces the need to maintain legacy systems.

Certified to The Open Group FACE™ Technical Standard, Virtuosity OA will help you develop the FACE-conformant products that are innovating aerospace and defense.

Virtualized solutions

Get a head-start

DornerWorks can apply Virtuosity OA to your system and accelerate your open architecture development, integration and testing.

Virtuosity OA is free and open source software that enables running multiple operating systems and mixed criticality applications simultaneously. The fastest and easiest way to benefit from virtualization for your project is with a DornerWorks Quick Start Package.

Proven expertise, on your side

As one of the only Xilinx Alliance Premier Partners in North America, and an NXP Proven Partner, DornerWorks has guided many technology developments to success.

We offer versions of Virtuosity for both the Xilinx Zynq UltraScale+ MPSoC and the NXP i.MX8.

Virtualized technology development to open architecture requirements can be complicated but it doesn’t have to be.

Get started with Virtuosity® OA today and replace your worries with confidence!

Get started today!

Our simple 3-step plan will determine a technology development course of action that best fits your needs.