

Cost-Effective Development with Virtualization

By DornerWorks



Virtualization can reduce the production cost of your product, both in nonrecurring engineering and unit cost, while also helping to reduce schedule. It allows you to combine and consolidate different software components and maintain isolation between them.

DornerWorks Virtuosity distribution is a *quick*, *easy*, and most importantly, *free*, way for developers to add virtualization to their Xilinx Zynq Ultrascale+ MPSoC based platforms.

What can virtualization do for you?



Reduce cost and schedule demands



Enable new security features



Reduce program and product risk

We deliver **virtualized solutions**, so you can focus on what matters most

DornerWorks has been developing virtualized products using type-1 hypervisors like open source Xen-based Virtuosity® for many years, and won a **Small Business Innovation Research (SBIR)** award in 2011 to explore its usage in aerospace and defense.

The Xilinx Zynq UltraScale+ MPSoC has revolutionized the way virtualization projects are developed, and Virtuosity helps you make the most of this powerful processing solution. As one of only three Xilinx Premier Alliance Partners in North America offering design services, DornerWorks engineers are certified annually, and adept at implementing the latest tools, technologies and techniques.



Getting started with embedded virtualization **is easy**

VIRTUOSITY®

- Virtuosity Distribution – Download from www.xen.world
- Premium Subscription Support – Call or register at www.xen.world



DORNERWORKS
Technology engineering so you can focus

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"I am fortunate to work with DornerWorks as a strong systems solution partner supporting our customers across so many disparate system architectures and technical challenges."

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—Senior Project Manager, Xilinx



Build powerful platforms with low overhead

Long lifecycle applications can benefit from the ability to add new Virtual Machines (VMs) to the system at a later date, creating a path for future upgrades.

This makes it easier to migrate to newer hardware, especially if the hardware supports backward compatibility, like the ARMv8 does for the ARMv7.

Virtuosity can be deployed without a recurring license fee. You can even try it out with no up-front costs to see how Virtuosity can meet your needs.

DornerWorks is ready and able to provide expert advice and support if you decide you need customizations, additional features, or Xen consultation.

Scale your products and integrate new software with ease



Virtualization **simplifies growth**, making it possible to isolate functions so that a breach or failure in one is contained. Not even security vulnerabilities in the VM's OS can compromise functions in another VM, providing defense in depth.



Virtualization allows for **centralized monitoring and management** external to the software functions being monitored. This can be used to detect and dynamically respond to breaches and faults, restarting faulted VMs or terminating a compromised VM before it is exploited.



A centralized monitoring function is useful in embedded applications that place a greater **emphasis on up-time**. The monitoring function can switch to a backup VM in case of a fault, to take over with minimal loss of service.

VIRTUOSITY[®]

Virtuosity helps you achieve **security, safety, and efficiency** by combining and consolidating different software components on a single chip, while maintaining isolation between them.

Get started today!

The systematic DornerWorks development process guides you from idea to revenue, so that you can focus on what matters most, **growing your business with standout products**.

DISCUSS

Discuss your project with us

1



DEVELOP

We develop a solution together

2



DELIVER

You deliver products your customers deserve

3

