# VIRTUALIZATION PERFORMANCE CHARACTERIZATION

When something is important to you and your business, it deserves your attention.

Whether you're handling safety-critical processes for flight operations, connecting your industrial machines to the internet of things, or helping doctors and nurses take better care of their patients, you need to know how your products and systems will perform when they launch.

*And you need to know now.*

## A replicable performance profile, before you launch

Virtuosity™ 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, and free to download and use.

The **Virtualization Performance Characterization** package enables access to product performance metrics early in the development cycle, for all applications running on Virtuosity enabled platforms.

VIRTUOSITY

## Performance metrics for your real-time app

A Virtuosity-supported real-time OS like WindRiver's **VxWorks 7** will allow you real-time security and virtualization. Virtuosity also supports Linux, FreeRTOS, and the popular U-Boot bootloader.

VxWorks

Before your launch, the **Virtualization Performance Characterization** package will deliver insight on:

- Effects of different cache settings
- Effects of virtual machine CPU affinity configurations
- Interrupt latency
- I/O throughput
- Virtualized file system performance
- Hypervisor CPU overhead
- And more

**DornerWorks**

**Start developing your project with us!**

www.DornerWorks.com
sales@DornerWorks.com
616.245.8369

Product Development | Hardware | Software | FPGA | IoT | Security | Separation Technology | Test Systems

## Here's what you get

- Consultation to identify critical performance metrics and configurations of interest
- Trade study report
  - » Perfomance results
  - » Instructions for running performance benchmarks
  - » Suggestions for future study and optimizations

Choose from existing benchmarks, and/or customer provided benchmarks.

## Easy to learn, easier to maintain

We'll walk you though the set-up and provide step-by-step instructions for reproducing the same results.

You keep the pre-built software components and configurations needed to rebuild the system on a i.MX8 development board (8XQ Valuation, 8M EVK); or Zynq UltraScale+ development board (ZCU102, ZCU106, ZCU111, Atlas-IIZ, UltraZed).

## Proven expertise, on your side

As one of only three **Xilinx Alliance Premier Partners** in North America, and as 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.

**XILINX**

ALLIANCE PROGRAM
PREMIER

Proven Partner
**NXP**

## Bring defense-class control to your project

**DARPA**, the **U.S. Navy**, **U.S. Army**, and other leaders in aerospace and defense are already integrating the *Virtuosity Hypervisor* into their technology, bringing security to the most safety-critical processes.

DornerWorks offers design services to assist in incorporating virtualization into your software architecture and to add the features or capabilities your product needs. As the provider of Virtuosity, we're ready to help you take the next step.

## Get started today!

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

**Start**          **Develop**          **Deliver**