



DEVELOP HIGH ASSURANCE SYSTEMS IN A SNAP

It can be challenging to build a secure system from the ground up.

DornerWorks Secure Microkernel Virtual Machine (VM) Composer is a configuration tool and the “easy button” that helps organizations develop and deploy virtualized high-assurance systems using a drag-and-drop interface.



**Easy Configuration
for Non-experts**



**Richer Software
Architectures**



**Foundation for
Trusted Applications**

Accelerate development of trusted software with
DornerWorks Virtual Machine Composer



SCHEDULE A MEETING

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PRODUCT BENEFITS

- Reduces development cycle time
- Simplifies system configuration
- Enables focus on your application instead of the platform
- Minimizes the frontend learning curve of seL4
- Provides solutions to developmental challenges:
 - Repository management
 - Tracking multiple VM configs
 - Identifying components that need to be built for the specified target
 - Configuring seL4 and CamkES, a development and runtime framework for building systems for microkernels
 - Ensuring consistency between various software components and configuration files

KEY FEATURES

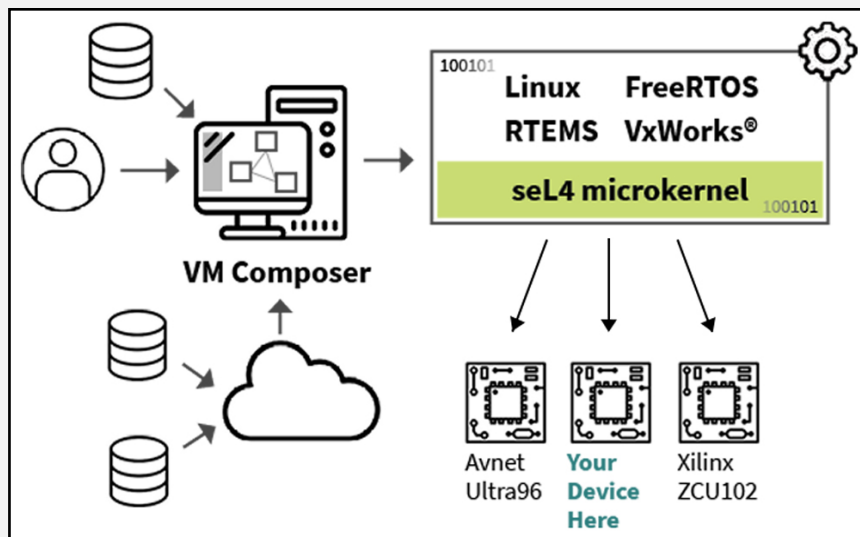
- Graphic User Interface (GUI) and Command Line Interface (CLI)
- System configurability: hardware target, number of VMs, connectivity between VMs, VM scheduling options, optional seL4 I/O services
- VM configuration
 - Execution Environment
 - CPU core, memory, and physical device allocation (i.e. pass-through)
 - Virtual device allocation
 - Software
 - Kernel, configuration, root file system
- Supported hardware targets: Avnet Ultra96, NASA HPSC, Xilinx ZCU102, Raspberry Pi 4
- Supported VM kernels: Linux, FreeRTOS, RTEMS, VxWorks



VMM MODE ON ARMv8

- A DoD customer was interested in using seL4 as a hypervisor to provide robust security and isolation and they wanted to run on the latest ARMv8 platform, due to its performance and feature set.
- DornerWorks ported the existing ARMv7 virtualization support to an ARMv8 implementation, and provided BSP layers for the Xilinx Zynq UltraScale+ MPSoC and the NXP i.MX8 platforms.
- The prototype showed the isolation benefits that the customer required on the platform they needed.

**Accelerate development of your high assurance
platforms with DornerWorks VM Composer**
SIGN UP FOR THE VM COMPOSER EVALUTION VERSION



GET THE VM COMPOSER TODAY
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