Xen i.MX Distribution and Support

Hypervisor Support Services

Freedom to focus

Many engineers and product developers struggle with an overload of things to do when implementing a complex multicore product. DornerWorks provides solutions to help you manage the varying applications across your muliple processor cores that enable you to quickly develop a custom solution so that you can get back to focusing on what you do best.

DornerWorks has been working on hypervisor solutions like Xen for several years, supported in part by numerous Small Business Innovative Research contract awards from the US Navy and DARPA. We already provide a free distribution of Xen on another ARMv8-A platform, and DornerWorks is recommended for design services by NXP as an NXP Proven Partner. We excel *where software and hardware design meet*.

With DornerWorks, you can realize your plan to run all of your applications on a single processor without excess cost or the need to become experts in yet another technology.

Xen iMX Distribution

The Xen i.MX Distribution allows you to run multiple operating systems on i.MX8 using the open source Xen hypervisor which manages multiple processor cores, assisted by built-in hardware virtualization and partitioning capabilities. The i.MX8 supercharges Xen by bringing hardware support not only for the virtualization with the array of ARMv8-A cores, but also the security checks needed for OS security, and the hardware partitioning to provide additional separation of safety/security critical hardware.

Applications

Virtualization on the i.MX8 will enable multiprocessing management for a wide range of applications, including:

- Augmented reality (AR)
- Device connectivity
- Security and application isolation
- Integrated Cockpit

Features

- Xen i.MX Distribution
  - Supports i.MX8 virtualization development
- Support Services
  - Provides technical support for your Xen solution
  - Service plan options to fit your situation

Support Services

Even better than the Xen Distribution itself, DornerWorks will stand ready and able to provide expert advice and support for your custom application. We have an array of service plan options to provide the best value for your situation:

- Subscription support (annual)
- Per-incident support

Call us to Jump Start your project

where hardware and software design meet

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About the Xen i.MX Distribution

The Xen i.MX Distribution is the port of the open-source Xen hypervisor for the NXP i.MX8 Multiprocessor. With the Xen i.MX Distribution, you get all the advantages of running a hypervisor (software isolation, security, and functional safety), plus the synergy of using virtualization on a high-end multiprocessor such as the NXP i.MX8 along with the software means to take advantage of all that the i.MX8 has to offer.

What's planned for the distribution

The Xen i.MX8 Distribution is currently under development, and available for demonstrations. When it is released, it will include the following items to help you get started:

- Xen source code for i.MX8 (Beta)
- Support for appropriate development boards
- Linux build configured for Xen
- Scripts to help you configure your system and build the distribution

Features

The first release of Xen i.MX8 Distribution will include the following:

- Linux guest OS support
- 32-bit and 64-bit guest modes
- Physical CPU scheduling
- Limited IO sharing between guests
- GPU Sharing using hardware partitioning

System Requirements

The development host PC should meet or exceed the following requirements:

- 64-bit x86 processor
- 8 GB RAM
- Ubuntu 14.04 LTS or later
- 100 GB of available disk space

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