

OpenSolaris for System z

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Overview

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Why OpenSolaris for System z?

- Combines System z reliability and stability with best known enterprise Unix
- Immediately leverages existing customer operations and system management expertise
- Provides access to development and management technology not available in other System z operating systems
- Manages scalability and operations costs via more effective virtualization
- Familiar environment
- Familiar tools and management systems
- Designed to consciously exploit z/VM features
- Open to evolving management tooling from Sun, IBM and others
- Delivers greater value for specialty engine investments



OpenSolaris and Linux

- Complementary capabilities:
 - Coexist in the same z/VM
 - Exploits IFLs
 - Permits reuse and optimization of existing process and procedures
 - Run some Linux executables directly (still experimental)
- Delivers technology not available in Linux
 - ZFS
 - Dtrace
 - Microvirtualization (zones, etc)
 - SPARC/Intel binary emulation (need z10, still under development)



Current Port Status

- Latest currently available for download (build 100)
- Complete system and compiler array
- Complete install image in System z formats
“DDR and Go”
- Includes Sun IPS package support
- Includes large library of open source tools and packages
- Java runtime in discussion with Sun and IBM
 - Zero-assembler OpenJDK
 - Sun Java, not IBM Java
- All source and object integrated into opensolaris.org
- Full services and training support available



Downloads



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Prerequisites

- System z9 BC/EC, z10 BC/EC
 - Does not support z900/990, z800/890, 9672
- z/VM 5.3 or 5.4 with network support SPE (VM64571 for 5.3, VM64471 for 5.4)
- Layer 2 VSWITCH
- 2 3390 mod 3 ECKD or equivalent FBA/EDEV



Experiences

- Base system install time: 45 minutes from start to finish
- Solaris admins able to immediately log in and configure the system without additional z/VM or System z knowledge
- System has proved extremely resilient to user misbehavior
- Most C/C++ apps require only updates to `config.guess/config.sub` to build
- Only one customer app so far required source changes (compiler pragmas)
- Some applications 45-55% faster on z9 EC than SPARC



Partial List of Downloaders

- BancoMexico
- Mayo Clinic
- Lockheed Martin
- EDS
- Vicom Infinity
- US Postal Service
- Russian Institute for Particle Physics
- Deutsche Bank (12 downloads!)
- Sun Microsystems/STK
- IBM (30 identifiable sites)

How to Engage?

- Best fit:
 - Customer with C/C++ app with few commercial app dependencies
 - Currently deployed on G2 or G3 SPARC (Later systems possible if on z10)
 - Need to replace hardware, but isn't ready or willing to do Linux
 - Need to manage environmentals
 - Need to work closely with Linux or z/OS already on Z



How to Engage?

- 6-8 week POC
 - Fixed price
 - Support provided by SNA
 - Includes 2 day startup workshop, installation assistance and 24x7 support
 - Customer provides app and system resources
- SNA Services
 - Training
 - Custom Engineering
 - Application Assessment
 - Support (OS and app)
- Can be IBM branded if IBM wishes
- Can be delivered world-wide



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