

MODELSIM 6.3 PLATFORM SUPPORT

Modelsim PE

- Windows 2000 and 32-bits XP

Modelsim SE/LE

SUSE Linux Enterprise Server (SLES) 10 is supported as of the 6.3 release.

The support includes the following platforms:

- 32-bit linux. SystemC is supported on this platform with gcc-4.0.2-rhe21.
- 64-bit linux_x86_64. SystemC is supported on this platform with gcc-4.0.2-linux_x86_64.

RedHat Enterprise Linux 4 is supported as of the 6.1b release.

The support includes the following platforms:

- 32-bit linux
- 64-bit linux_x86_64

Solaris OS 10 is supported as of the 6.1a release.

Solaris 10 has the following limitations:

- In the OS, vt alarm is producing irregular and random beats between 20ms and 100ms. As a result, the profiler produces the error message, "Too few samples." To workaround this problem, add the following line to the file /etc/system and reboot the system:
set hires_tick=1
This will produce consistent sample times. The minimum sample time will be 20ms. This problem has been filed as Sun CR 6290459 and will be fixed in a coming kernel patch. With the patch, the minimum sample time will be approximately 10ms, as in previous Solaris releases.
- In rare cases, simulations using sockets via the FLI may hang the system and produce a messages like "nfs server array not responding" may be produced. This problem has been filed as Sun CR 6296698.
- In Solaris 10, g7 is always reserved. Any PLI/FLI/DPI using g7 will break under Solaris 10.

The EM64T is supported as of the 6.0b release.

The support includes EM64T machines loaded with Suse 9.1 OS or RedHat Enterprise Linux 3 Update 3 OS and the following linux configurations.

- 32-bit linux
- 64-bit linux_x86_64 FlexLM v8.2a (which was shipped in 6.0x) is not supported on an EM64T machine loaded with Suse 9.1 OS.

The following 64-bit platforms are supported as of the 6.0 release.

- The 64-bit simulator is supported on the AMD Opteron and compatible processors running 64-bit Linux (SuSE 9.0 (x86-64) or RedHat Enterprise Linux WS release 3) as the linux_x86_64 platform. The profiling feature is not supported in 64-bit mode. The 32-bit simulator for the linux platform may also be installed and used concurrently on these systems.

Designs with SystemC content have different platform and operating system dependencies than designs without SystemC content.

The following platforms and operating systems are supported for designs with SystemC content:

- RedHat 7.3 and greater
- RedHat EWS2.1/7.2 and greater (simulation environment version 5.8b and greater)
- Solaris 8, 9, and 10
- HP-UX 11.0 and greater
- Win32 XP and 2000 (Simulation environment versions 6.0 and greater)

The following platforms will be discontinued as of the 6.4 release:

- RedHat 2.1

The following platforms are discontinued as of the 6.3 release:

- HP-UX Platforms - hp700, hppa64
- AIX Platforms - rs6000, rs64

The following platforms are discontinued as of the 6.2 release:

- Windows 98
- Windows ME
- Windows NT 4.0
- Solaris 2.6
- Solaris 7
- HP-UX Itanium
- AIX 4.3

The following platforms are discontinued as of the 6.0 release:

RedHat 6.0 through 7.1

For a complete list of supported platforms see the Install Guide under the section Supported platforms.

• **COMPILER AND DEBUGGER SUPPORT**

SystemC has dependencies on C++ compiler versions. The following gcc compilers are supported for SystemC:

As of release 6.3, the linux versions of gcc 3.2.3 and 3.3 compilers will be replaced with version 4.0.2. This means that gcc 3.2.X and 3.3 will not be supported or distributed as of release 6.3. Only the following versions will be supported in 6.3:

- gcc-3.3.1-mingw32
- gcc-4.0.2-linux_x86_64
- gcc-4.0.2-rhe21
- gcc-3.3-sunos58
- gcc-3.3-sunos59
- gcc-3.3-sunos510

In order to facilitate an easy transition for users, both gcc 3 and gcc 4 will be supported and distributed in release 6.2. Since support for 64-bit SystemC on linux_x86_64 was added in release 6.2, linux_x86_64 will only be supported with the gcc 4.0.2 release. The following versions are supported in 6.2:

- gcc-3.3.1-mingw32
- gcc-4.0.2-linux_x86_64

- o gcc-3.2.3-rhe21
- o gcc-4.0.2-rhe21
- o gcc-3.3-sunos58
- o gcc-3.3-sunos59
- o gcc-3.3-sunos510

The is no change on the hp700 platform and it will continue to be supported with aCC 3.45.

QuickThreads is now the default thread for SystemC co-routines.

Our tests show that QuickThreads has better reliability than PThread (the OSCI-default) on linux_x86_64 and has better performance in certain cases. As a result, QuickThreads is now the default SystemC thread for all platforms that support SystemC.

C Debug compatibility information by platform.

- On HP-UX 11.0, the built-in HP wdb 3.3 program is used as the underlying C/C++ debugger. In order to run wdb successfully, you must have installed HP-UX PHSS_23842, or a superseding patch. Without this patch installed, error messages will occur during C Debug startup.
- On rs6000, gdb-6.0 works with gcc-3.2. Additionally, when creating shared objects, 'ld' (/bin/ld) should be used, not 'gcc'. This combination works with AIX-5.1. On AIX-5.1 use gcc-3.2-aix51. The native compiler /bin/cc is not compatible with gdb-6.0.
- On Solaris OS 10, C Debug is supported as of the 6.2e release.