

- The GDB debugger has been removed

For more information about Xcode enhancements, see *What's New in Xcode*.

## BSD and Kernel Features

The BSD, driver, and kernel layers of OS X have been enhanced as follows:

- OS X supports remote kernel and kernel extension debugging using LLDB.
- The OS X v10.9 kernel debug kit now includes `kext` macros for LLDB.
- Developers producing kernel extensions for OS X v10.9 should sign their extensions with a Developer ID certificate and install them in `/Library/Extensions/`. Extensions in `/Library/Extensions/` are not loaded unless they are properly signed.

OS X v10.9 also warns the user when an unsigned or improperly signed kernel extension in `/System/Library/Extensions/` is loaded into the kernel or added to a `kext` cache.

**Important:** The code signing technique used for kernel extensions changed in OS X v10.8.3. Kernel extensions signed with earlier versions of OS X are treated as *unsigned* by OS X v10.9.

Kernel extensions signed using the newer signing tools are incompatible with OS X v10.7.5 and earlier. If you are producing a kernel extension that must support versions of the operating system prior to version 10.8, you must install an unsigned copy in `/System/Library/Extensions`, in addition to any signed copy in `/Library/Extensions`. Versions of OS X prior to version 10.9 will ignore the unsigned copy in `/Library/Extensions`. If the user upgrades to OS X v10.9 or later, the user's system will prefer the signed copy in `/Library/Extensions`.