# Guidelines for Driver and Simulator Developers

The ASCOM development servers are available for any developer who wishes to contribute code related to The ASCOM Initiative. The Subversion source code control system makes it easy to collaborate with a team of developers, carry out peer reviews and give other ASCOM developers visibility of your code. It’ll also make sure you code is backed up, both on other developer’s working copies and in the daily tape backup that we run.

# Where to Put Your Code

As a driver/simulator developer, you’ll have readonly access to all of the other drivers and simulators under the repository root starting at /ASCOM/Drivers and Simulators

You’ll have read/write access to any projects that you’re actively participating in. This way, you have plenty of reference code to look at and you can freely commit changes to your own part of the tree without fear of affecting others.

When you create a new project, we recommend the following naming convention:

* /*Vendor*/*DeviceName*

Your solution file goes in the /DeviceName folder, with sub-folders under that for each project. If you are working on a compound driver based on the LocalServer (singleton) template, then one of your projects will be named *DeviceName*Server, and you’ll have a series of projects named *DeviceType*Driver for each of the devices supported. Example: say you’re working on a Meade LX-200 Classic driver, with support for both the telescope drive and the build-in focuser. You need to implement both the Telescope interface and the Focuser interface and you’ll expose those interfaces by wrapping them in a LocalServer. This will be your project structure:

/Meade/LX200/LX200.sln  
 /LX200 Server/  
 /Telescope Driver/   
 /Focuser Driver/

# Assembly Naming and Versioning

We recommend naming your projects (and the assemblies they produce) along the following lines:

* **ASCOM**.*DeviceName*.*DeviceClass* (example: **ASCOM.LX200.Telescope**)

We recommend that you give your assemblies the same major and minor version as the ASCOM platform that they were compiled against. So if you;re using ASCOM Platform 5.1, then your assembly should have Major Version = 5 and Minor Version = 1. We suggest letting Visual Studio manage the Revision and Build numbers automatically, by placing an asterisk (\*) in the Build number and leaving the Revision number blank.

# Referencing Platform Components (Platform Dependencies)

When developing drivers, we recommend that you do not rely on any assemblies being installed in the Global Assembly Cache. Your driver should be able to build and run without any version of the ASCOM Platform installed.

To facilitate this, you’ll find a folder called Platform Dependencies in your working copy, which contains the latest build of all of the core platform components. Your drivers should reference these files directly, using relative paths. When adding a reference to your project, do not use the .NET or COM tabs. Use the Browse tab and navigate directly to the Platform Dependencies folder.