Preparing a Build Environment

# Prepare Environment

This build environment was created in a VMware VM running a Windows 7 (64 bit) instance that was fully patched to 12th January 2012. You may need to adapt it for 32bit operating systems or if the versions used here are superseded.

## VS2010

* Install Visual Studio 2010
* Run Windows update until no more updates are applied
* Start and select General development settings
* Run Windows Update to pick up required patches
* Install VS2010 SP1
* Run Windows Update to pick up required patches

## TortoiseSVN

* Install version 1.7.3 (64bit)
* Check the command line tools option on the setup dialogue

## Installaware 10

* Install version 10.10 - password *(note capital O)* is: Ozge
* Ensure you select "Studio" and not "Studio Admin"
* Select Custom Install
  + Deselect all runtimes except "Windows installer" and "Windows installer (x64)"
  + Deselect all SQL Servers
  + Deselect Visual Studio Add-in
* Install for all users
* Run the IA10.10 license utility
* Set an environment variable

## HTML Help compiler

* This is installed by IA10 above so no action needed

## Sandcastle Help File Builder

* Run the guided installer version 1.9.3
* Ignore the fact that Help 2 compiler is not found - we don't need it, select "proceed without it" when prompted.
* Install Sandcastle on the Sandcastle tools page
* Click Apply Patch on the Sandcastle Patch page
* We don't need the German language pack
* Extract the MAML guide if you are interested, it is only content and is non-functional
* Ignore the Web Project Customer Code Providers page
* Ignore the HTML to MAML converter page
* Install the MAML schema IntelliSense for VS2010
* Install SHFB on the Sandcastle Help File Builder page
* Close the guided installer

## MS Build Community Tasks

* Download and install the current release msi from <http://msbuildtasks.tigris.org/>
* Create string registry entries to hold your Subversion username and password:
  + HKEY\_CURRENT\_USER\Software\ASCOM\Build\SubversionUserName
  + HKEY\_CURRENT\_USER\Software\ASCOM\Build\SubversionPassword

# Automated Build (Recommended)

* This process will
  + Erase any current build directory structure
  + Export a copy of the latest subversion source
  + Determine the correct build and subversion revisions
  + Create appropriate version files for VS2010 to pick up
  + Make a VS2010 build
  + Make Platform and Developer Help file builds
  + Make Platform and Developer installer builds
* Create a directory on the build machine e.g. C:\ASCOM Build
* Export or copy the buildplatform.msbuild file from the Subversion repository to this directory
* Open an elevated VS2010 command prompt with Admin privileges
* CD \ASCOM Build
* enter the command msbuild buildplatform.msbuild
* At the end of the build the Platform installers will be moved to the ASCOM Build directory

# Manual Build

## TortoiseSVN

* Create a directory: C:\ASCOM Source and do an SVN Checkout to this:
  + set the source URL to https://ascom.svn.sourceforge.net/svnroot/ascom/trunk
  + Ensure that the Omit Externals checkbox is unchecked
  + Checkout the HEAD revision
* Checkout the code to the directory

## VS2010

* Open the ASCOM Platform VS2010 project in the root of the download directory tree
* Set the Solution Configuration from "Debug Quick" to "Release",
* Set the Solution Platform to "Any CPU" if it isn't already set that way
* Build the solution
* You should have 0 errors and 0 warnings

## Help

* Start SHFB
* Open \Help\ASCOMPlatform.shfproj
* Set Solution Configuration to "Release"
* Build the Platform help file
* Open \Help\ASCOMDeveloper.shfproj
* Set Build Configuration to "Release"
* Build the Platform help file

## Installer

* Start InstallAware
* Open the installer project ASCOM Platform 6 Developer.mpr located in \Releases\ASCOM 6\Developer\Installer Project
* Build the installer - should run OK with no errors
* Open the installer project ASCOM Platform 6.mpr located in \Releases\ASCOM 6\Platform\Installer Project
* Build the installer - should run OK with no errors