

XNA Migration to MonoGame

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Guide for migrating an XNA 4.0 game to MonoGame.

- Create new *MonoGame Cross-Platform Desktop* project in Visual Studio.
- Add all source code files from XNA project
 - Right click project name in *Solution Explorer*, *Add, Existing Item*
 - From the XNA project, navigate to the source (.CS) files
 - Shift + Click to select all .CS files, then press *Add*
 - Press *Yes* to overwrite any existing files
- Start MGCB Editor and import assets
 - Under *Content* in *Solution Explorer*, double click *Content.mgcb*
 - Press the *Add Existing Item* button
 - In XNA project, navigate to <project>/<project>Content
 - Shift + select all asset files (.spritefont, .png, .wav, etc). Don't include the *obj* folder or *.contentproj* file
 - Alternatively, use *Add Existing Folder*, but you won't have to option to select individual files in the folder
 - Press *Open*
 - Leave *Copy the file to the directory* selected, check *Use the same action*, Press *Add*
 - For each subfolder containing asset files, create subfolder under project (*Add, New Folder*). With that folder selected, repeat the import process for the asset file matching that folder.
 - If any music files are .WAV, change *Processor* for music from *SoundEffect* to *Song*.
 - Fix any naming issues with content files (mus_trial2 to mus_trial, se09a to se09)
 - *Save*, Close MGCB Editor
- Fix any missing fonts in .spritefont files
 - Install the missing font, or change the font in <fontname>
 - Old XNA fonts are in *RedistributableTTFs_ARCHIVE_3_1.zip*

- Delete any .contentproj files
- Remove the following import statements from source code (*Edit > Find and Replace > Replace in Files*)
 - using Microsoft.Xna.Framework.GamerServices;
 - using Microsoft.Xna.Framework.Storage;
- Remove references to the following in source code.
 - GamerServices
 - Storage
 - StorageDevice
 - GamerServicesComponent
 - Guide
 - SignedInGamer
- Code using *Guide*, *GamerServicesComponent*, and *SignedInGamer* should be removed or commented out. Code using *Storage* and *StorageDevice* must be rewritten to use an alternate method for writing to the storage device.
- Global replace:
 - Guide.IsVisible > false
 - Guide.IsTrialMode > false
- Add any missing project references
 - Right click *Dependencies* in *Solution Explorer*
 - Select *Add Shared Project Reference*
 - Press the *Browse* button
 - Navigate and select the *.DLL* file
 - Press *OK*
 - If using a custom DLL, create a new *MonoGame NetStandard Library* project. Import the source files and rebuild the DLL
- In *Program.cs*, remove *#if WINDOWS || XBOX*
 - Alternatively, add a build flag for *WINDOWS* (*Project, <projectname> Properties, Build, Conditional compilation symbols, insert **WINDOWS***)
- Update source code to skip over any file loading screens, or add new file loading code